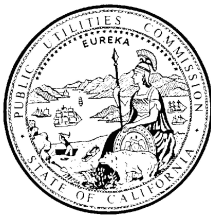


Docket:	:	<u>A.09-07-001</u>
Exhibit Number	:	<u> </u>
Commissioner	:	<u>John Bohn</u>
Admin. Law Judge	:	<u>Jeffrey O' Donnell</u>
DRA Project Mgr.	:	<u>Patrick Hoglund</u>



**DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**REPORT ON THE
RESULTS OF OPERATIONS
IN REDWOOD VALLEY DISTRICT
OF
CALIFORNIA WATER SERVICE COMPANY
Test Year 2011 and
Escalation Years 2012 and 2013
Application 09-07-001**

For authority to increase water rates located in its
Redwood Valley District serving portions of the community of Lucerne in Lake
County, Dillon Beach in Marin County, and communities in the vicinity of
Guerneville and Santa Rosa in Sonoma County.

San Francisco, California
February 10, 2010

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MEMORANDUM

The Division of Ratepayer Advocates (“DRA”) of the California Public Utilities Commission (“Commission”) prepared this Report in California Water Service Company’s (“CWS”) rate case proceeding A.09-07-001. In this docket, the Applicant requests an order for authorization to increase rates charged for water service as follows:

\$398,600 or 154.8 % in Test year 2011; by \$(6,500) or -1.0% in Escalation year 2012; and by \$(6,200) or -1.0% in Escalation year 2013 in its Coast Springs service area;

\$682,600 or 54.9% in Test Year 2011; by \$121,300 or 6.3% in Escalation year 2012; and by \$121,300 or 5.9% in Escalation year 2013 in its Lucerne service area;

\$428,200 or 86.3% in Test year 2011; by \$6,900 or 0.8% in Escalation year 2012; and by \$6,900 or 0.7% in Escalation year 2013 in its Unified service area.

The applicant requests adoption of a rate of return of 8.58% from D. 09-05-019. DRA presents its analysis and recommendations associated with the Applicant’s request in this Report.

Patrick Hoglund serves as DRA’s project coordinator in this review, and is responsible for the overall coordination in the preparation of this report. Appendix A contains witnesses’ prepared qualifications and testimony.

DRA’s reports on payroll, conservation expenses and special requests are included under separate Reports.

DRA’s Legal Counsels for this case are Selina Shek, Allison Brown, and Hien Vo.

EXECUTIVE SUMMARY

For Coast Springs, CWS requests increasing rates by 154.8% in Test Year 2011 and -1.0% in Escalation Year 2012, whereas DRA recommends an increase of 81.9% in Test Year 2011, and inflationary increases for the Escalation Years. DRA further recommends that the increase be phased in over three years.

For Lucerne, CWS requests increasing rate by 54.9% in Test Year 2011 and 6.3% in Escalation Year 2012, whereas DRA recommends an increase of 30.6% in Test Year 2011, and inflationary increases for the Escalation Years.

For Unified, CWS requests increasing rate by 86.3% in Test Year 2011 and 0.8% in Escalation Year 2012, whereas DRA recommends an increase of 23.1% in Test Year 2011, and inflationary increases for the Escalation Years.

Key Recommendations

DRA recommends that CWS' requested rate of return of 8.58% be adopted in this proceeding.

DRA's recommendations are based on lower estimates of Operation and Maintenance expenses (Chapter 3), lower estimates of Administrative and General expenses (Chapter 4), lower Plant additions (Chapter 7) and lower Ratebase (Chapter 9).

DRA addresses its recommended treatment of CWS' 30 Special Requests ("SR") in a separate report. That report discusses Special Request #12 regarding continuation of rate support fund, Special Request #4 regarding the allowance of a true-up of interim rates for the Redwood Valley District, and Special Request #20 regarding compliance with D.08-03-020 requiring CWS to report on alternative water supplies in the Coast Springs rate area of the Redwood Valley District.

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
-	Executive Summary	
1	Overview and Policy Introduction and Summary of Earnings	Patrick Hoglund
2	Water Consumption and Operating Revenues	Lisa Bilir Zachary Burt
3	Operations and Maintenance (except Payroll) Expenses	Raymond Yin
4	Administrative & General (except Payroll & Conservation) Expenses	Cleason Willis
5	Taxes Other Than Income	Jerry Oh
6	Income Taxes	Jerry Oh
7	Utility Plant in Service	Isaiah Larsen
8	Depreciation Reserve and Depreciation Expense	Isaiah Larsen
9	Ratebase N/G multiplier	Isaiah Larsen Richard Rauschmeier
10	Customer Service	Toni Canova
11	Rate Design	Lisa Bilir
12	Water Quality	Pat Ma
13	Step Rate Increase	Patrick Hoglund

1 **CHAPTER 1: OVERVIEW AND POLICY**

2 **A. INTRODUCTION**

3 This Report sets forth DRA’s analysis and recommendations for
4 A. 09-07-001, CWS’ general rate increase request for Test Year 2011 and
5 Escalation Years 2012 and 2013.

6 **B. SUMMARY OF RECOMMENDATIONS**

7 At the end of this Chapter, for each ratemaking area, Coast Springs,
8 Lucerne, and Unified, Tables 1-1 through 1-3 of the Summary of Earnings
9 compare the results of operations for Test Year 2011 including revenues,
10 expenses, taxes and rate base.

11 **C. DISCUSSION**

12 CWS requests the total revenues as follows:

13 **Coast Springs rate area**

14	<u>Year</u>	<u>Amount of Increase</u>	<u>Percent</u>
15	2011	\$398,600	154.8%
16	2012	\$ (6,500)	-1.0%
17	2013	\$ (6,200)	-1.0%

18 **Lucerne rate area**

19	<u>Year</u>	<u>Amount of Increase</u>	<u>Percent</u>
20	2011	\$682,600	54.9%
21	2012	\$121,300	6.3%
22	2013	\$121,300	5.9%

1 **Unified rate Area**

2 Year Amount of Increase Percent

3 2011	\$428,200	86.3%
4 2012	\$ 6,900	0.8%
5 2013	\$ 6,900	0.7%

6 CWS estimates that its proposed rates in the Application will produce
7 revenues providing the following returns:

8 Year Return on Rate Base Return on Equity

9 2011	8.58%	10.2%
10 2012	8.58%	10.2%
11 2013	8.58%	10.2%

12 **D. CONCLUSION**

13 DRA recommends a revenue increase for the Test Year as follows
14 (Escalation Years 2012 and 2013 are covered in Chapter 12):

15 Service Area Year Amount of Increase Percent

16 Coast Springs	2011	\$210,700	81.9%
17 Lucerne	2011	\$380,500	30.6%
18 Unified	2011	\$112,200	23.1%

19 D.06-08-011 authorized the last general rate increase for CWS in
20 A. 05-08-013, resulting in a rate of return on rate base of 8.66% in 2008-2009.
21 Present Rates in this report are those authorized in D. 06-08-011.

1 A comparison of DRA and CWS' estimates for rate of return on rate base
2 for the Test Year 2011 at present and the utility's proposed rates is shown below:

3 RATE OF RETURN

4 **Coast Springs Rate Area**

	<u>DRA</u>	<u>CWS</u>	<u>Diff</u>
6 Present Rates	-16.54%	-4.92%	11.62%
7 Proposed Rates	30.50%	8.58%	-21.91%

8
9 **Lucerne Rate Area**

	<u>DRA</u>	<u>CWS</u>	<u>Diff</u>
12 Present Rates	2.42%	-0.16%	-2.58%
13 Proposed Rates	13.46%	8.58%	-4.88%

14
15 **Unified Rate Area**

	<u>DRA</u>	<u>CWS</u>	<u>Diff</u>
18 Present Rates	-0.02%	-3.23%	-3.20%
19 Proposed Rates	32.52%	8.58%	-23.93%

TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS	
	Estimate	Estimate	exceeds DRA	%
			Amount	
(Thousands of \$)				
Operating revenues	257.4	257.5	0.1	0.0%
Operating expenses:				
Operation & Maintenance	154.2	169.7	15.5	10.1%
Administrative & General	63.1	68.9	5.8	9.2%
G. O. Prorated Expense	60.2	81.2	21.0	34.9%
Dep'n & Amortization	92.0	98.9	6.9	7.5%
Taxes other than income	6.5	15.0	8.5	130.8%
State Corp. Franchise Tax	(6.9)	(19.8)	(13.0)	188.6%
Federal Income Tax	<u>(25.5)</u>	<u>(67.0)</u>	<u>(41.5)</u>	<u>162.6%</u>
Total operating exp.	343.6	346.8	3.2	0.9%
Net operating revenue	(86.2)	(89.3)	(3.1)	3.6%
Rate base	521.0	1,815.0	1,294.0	248.4%
Return on rate base	-16.54%	-4.92%	11.62%	-70.3%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA	CWS	CWS	
	Estimate	Estimate	exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	655.6	656.0	0.4	0.1%
Operating expenses:				
Operation & Maintenance	154.2	169.7	15.5	10.1%
Administrative & General	63.1	68.9	5.8	9.2%
G. O. Prorated Expense	60.2	81.2	21.0	34.9%
Dep'n & Amortization	92.0	98.9	6.9	7.5%
Taxes other than income	6.5	15.0	8.5	130.8%
State Corp. Franchise Tax	28.3	15.4	(12.9)	-45.7%
Federal Income Tax	92.4	51.1	(41.2)	-44.6%
Total operating exp.	496.7	500.2	3.5	0.7%
Net operating revenue	158.9	155.8	(3.1)	-2.0%
Rate base	521.0	1,815.0	1,294.0	248.4%
Return on rate base	30.50%	8.58%	-21.91%	-71.9%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
(Thousands of \$)				
Operating revenues	257.4	468.1	210.7	81.9%
Operating expenses:				
Operation & Maintenance	154.2	154.2	0.0	0.0%
Administrative & General	63.1	63.1	0.0	0.0%
G. O. Prorated Expense	60.2	60.2	0.0	0.0%
Dep'n & Amortization	92.0	92.0	0.0	0.0%
Taxes other than income	6.5	6.5	0.0	0.0%
State Corp. Franchise Tax	(6.9)	11.8	18.6	-271.0%
Federal Income Tax	<u>(25.5)</u>	<u>35.6</u>	<u>61.2</u>	<u>-239.6%</u>
Total operating exp.	343.6	423.4	79.8	23.2%
Net operating revenue	(86.2)	44.7	130.9	-151.9%
Rate base	521.0	521.0	0.0	0.0%
1 Return on rate base	-16.54%	8.58%	25.12%	-151.9%

TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	1,242.8	1,242.8	0.0	0.0%
Operating expenses:				
Operation & Maintenance	555.8	625.7	69.9	12.6%
Administrative & General	233.0	252.8	19.8	8.5%
G. O. Prorated Expense	220.7	297.4	76.7	34.8%
Dep'n & Amortization	151.0	164.2	13.2	8.7%
Taxes other than income	55.8	70.2	14.4	25.8%
State Corp. Franchise Tax	(8.6)	(30.9)	(22.3)	260.5%
Federal Income Tax	<u>(52.8)</u>	<u>(129.1)</u>	<u>(76.4)</u>	<u>144.8%</u>
Total operating exp.	1,155.0	1,250.2	95.3	8.3%
Net operating revenue	87.8	(7.4)	(95.3)	-108.5%
Rate base	3,623.5	4,770.2	1,146.7	31.6%
Return on rate base	2.42%	-0.16%	-2.58%	-106.4%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	1,925.2	1,925.4	0.2	0.0%
Operating expenses:				
Operation & Maintenance	563.0	632.9	69.9	12.4%
Administrative & General	233.0	252.8	19.8	8.5%
G. O. Prorated Expense	220.7	297.4	76.7	34.8%
Dep'n & Amortization	151.0	164.2	13.2	8.7%
Taxes other than income	55.8	70.2	14.4	25.8%
State Corp. Franchise Tax	51.1	28.8	(22.3)	-43.7%
Federal Income Tax	162.7	69.8	(92.9)	-57.1%
Total operating exp.	1,437.3	1,516.1	78.8	5.5%
Net operating revenue	487.9	409.3	(78.6)	-16.1%
Rate base	3,623.5	4,770.2	1,146.7	31.6%
Return on rate base	13.46%	8.58%	-4.88%	-36.3%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
(Thousands of \$)				
Operating revenues	1,242.8	1,623.3	380.5	30.6%
Operating expenses:				
Operation & Maintenance	555.8	559.8	4.0	0.7%
Administrative & General	233.0	233.0	0.0	0.0%
G. O. Prorated Expense	220.7	220.7	0.0	0.0%
Dep'n & Amortization	151.0	151.0	0.0	0.0%
Taxes other than income	55.8	55.8	0.0	0.0%
State Corp. Franchise Tax	(8.6)	24.7	33.3	-388.1%
Federal Income Tax	<u>(52.8)</u>	<u>67.3</u>	<u>120.1</u>	<u>-227.7%</u>
Total operating exp.	1,155.0	1,312.4	157.4	13.6%
Net operating revenue	87.8	310.9	223.1	253.9%
Rate base	3,623.5	3,623.5	0.0	0.0%
1 Return on rate base	2.42%	8.58%	6.16%	253.9%

TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	485.9	495.9	10.0	2.1%
Operating expenses:				
Operation & Maintenance	219.9	244.4	24.5	11.2%
Administrative & General	106.4	111.8	5.4	5.1%
G. O. Prorated Expense	75.1	101.5	26.4	35.2%
Dep'n & Amortization	68.2	138.4	70.2	102.9%
Taxes other than income	13.5	19.0	5.5	40.7%
State Corp. Franchise Tax	(1.1)	(14.5)	(13.5)	1274.4%
Federal Income Tax	4.1	(36.2)	(40.3)	-991.8%
Total operating exp.	486.1	564.4	78.3	16.1%
Net operating revenue	(0.2)	(68.5)	(68.3)	41423.4%
Rate base	805.2	2,122.6	1,317.4	163.6%
Return on rate base	-0.02%	-3.23%	-3.20%	15652.3%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA	CWS	CWS	
	Estimate	Estimate	exceeds DRA	%
Amount				
(Thousands of \$)				
Operating revenues	910.5	924.3	13.8	1.5%
Operating expenses:				
Operation & Maintenance	221.8	249.5	27.8	12.5%
Administrative & General	106.4	111.8	5.4	5.1%
G. O. Prorated Expense	75.1	101.5	26.4	35.2%
Dep'n & Amortization	68.2	138.4	70.2	102.9%
Taxes other than income	13.5	19.0	5.5	40.7%
State Corp. Franchise Tax	36.3	22.9	(13.4)	-37.0%
Federal Income Tax	127.4	99.0	(28.4)	-22.3%
Total operating exp.	648.7	742.1	93.5	14.4%
Net operating revenue	261.8	182.2	(79.7)	-30.4%
Rate base	805.2	2,122.6	1,317.4	163.6%
Return on rate base	32.52%	8.58%	-23.93%	-73.6%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
(Thousands of \$)				
Operating revenues	485.9	598.1	112.2	23.1%
Operating expenses:				
Operation & Maintenance	219.9	220.4	0.5	0.2%
Administrative & General	106.4	106.4	0.0	0.0%
G. O. Prorated Expense	75.1	75.1	0.0	0.0%
Dep'n & Amortization	68.2	68.2	0.0	0.0%
Taxes other than income	13.5	13.5	0.0	0.0%
State Corp. Franchise Tax	(1.1)	8.8	9.9	-934.2%
Federal Income Tax	4.1	36.7	32.6	802.9%
Total operating exp.	486.1	529.0	43.0	8.8%
Net operating revenue	(0.2)	69.1	69.3	-42003.1%
Rate base	805.2	805.2	0.0	0.0%
1 Return on rate base	-0.02%	8.58%	8.60%	-42003.1%

CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations regarding forecasted number of customers, water sales and operating revenues for CWS' Redwood Valley district. The Redwood Valley district includes General Metered Service Tariffs for six divisions – Armstrong, Coast Springs, Hawkins, Lucerne, Noel Heights, and Rancho del Paradiso, all located in Sonoma County. In CWS' workpapers, the Redwood Valley district is split into three divisions including Coast Springs, Lucerne, and Unified. In 2008 at year end, Redwood Valley had an average of 428 service connections in the Unified division, 1,272 service connections the Lucerne division, and 251 service connections in the Coast Springs division. Redwood Valley's total service connections in 2008 was 1,951. DRA reviewed CWS' data responses, testimony, application, and workpapers before formulating its own estimates.

B. SUMMARY OF RECOMMENDATIONS

DRA adhered to the methods outlined in the Rate Case Plan ("RCP") in DRA's analysis of sales forecast and revenues in every district except Redwood Valley. In Redwood Valley, DRA does not object to CWS' proposal to use a simple average to forecast sales per customer. The reasons CWS provided are that there is insufficient recorded historical data and that data is necessary because sales vary drastically among the sub-regions of the Redwood Valley District.

1) Average Active Service Connections

The Commission should adopt DRA's forecasted number of customers.

2) Metered Sales and Supply

DRA agrees with CWS' proposal.

1 **3) Operating Revenues**

2 The Commission should adopt DRA's estimates for operating revenues.
3 DRA uses the same method as CWS to calculate operating revenues, although
4 DRA presents the operating revenues differently for illustrative purposes (see
5 Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2.
6 for the complete explanation).

7 **4) Unaccounted for Water**

8 DRA agrees with CWS' estimate of unaccounted for water, based upon the
9 five-year average recorded unaccounted for water, for the Coast Springs and
10 Lucerne divisions. For the Unified division, CWS did not provide accurate data to
11 calculate the five-year average, and DRA recommends 8% unaccounted for water.

12 **C. DISCUSSION**

13 **1) Average Active Service Connections**

14 Customer growth is the forecasted growth of a customer base in a given
15 area. CWS and DRA use customer growth to project revenues for 2011-2012.
16 The RCP, adopted in D.07-05-062 requires the number of customers to be forecast
17 using a five-year average of the change in the number of customers by customer
18 class, unless an unusual event occurs, in which case an adjustment to the five-year
19 average may be made.¹ Table 2-2 and 2-3 at the end of this chapter summarize
20 DRA and CWS' proposed average number of customers for each customer class in
21 2011 and 2012, respectively.

¹ D.07-05-062, Appendix A: RCP, p. A-23, footnote 4.

1

2 **a. Residential, Business, Multi-Family, Public Authority,**
3 **Industrial, and Other**

4 In Redwood Unified, CWS proposes to forecast the number of customers
5 using the three year average change in customers by customer class for the period
6 2006 through 2008 for the Residential, Business and Multi-family customer
7 classes. For the Public Authority customer class, CWS proposes using the five
8 year average for 2004 through 2008. DRA does not object to the use of the three-
9 year average in this instance, provided this is applied to all customer classes
10 uniformly. In Redwood, Coast Springs and Lucerne divisions, CWS proposes to
11 use the five year average for 2004 through 2008. DRA agrees.

12 **2) Metered Sales and Supply**

13 Table 2-4 and 2-5 at the end of this chapter summarize DRA and CWS’
14 proposed metered and flat rate sales in Redwood Valley for each customer class in
15 2011 and 2012, respectively.²

16 In response to DRA data request LWA-3 regarding the method CWS used
17 to forecast sales in Redwood Valley, CWS stated:

18 “Cal Water did not use the “new committee method”
19 to estimate sales per customer for the residential,
20 business and multi-family customers in the Lucerne,
21 Unified and Coast Springs systems for its submittal in
22 the 2009 GRC due to insufficient recorded historical
23 sales data on those systems. Because the sales vary
24 drastically among the sub-regions of the Redwood
25 Valley District, detailed monthly sales data for each

² If DRA’s sales forecast combined with DRA’s other recommendations leads to higher bill increases than CWS presented in its notices to customers, DRA recommends that the total bill increases should be capped at CWS’ proposed levels.

1 sub-district is required in order to get meaningful
2 results. Without a sufficient number of years of data
3 for each rate area within the Redwood Valley region,
4 the regression analysis for the sales forecast yields
5 skewed results. Therefore, Cal Water used a simple
6 average for the sub-districts in the Redwood Valley
7 area based on the available recorded data.”

8 Given the unique circumstances in this district, and the lack of data to apply
9 the New Committee Method, DRA agrees with CWS’ proposed method of
10 calculating metered sales.

11 **3) Operating Revenue**

12 Tables 2-6 and 2-7 at the end of this chapter summarize DRA and CWS’
13 forecasted operating revenue at present rates in 2011, at CWS proposed rates in
14 2011 and at present rates in 2012, respectively.

15 (a) Residential

16 CWS calculates operating revenue for metered residential customers by (1)
17 taking the sum of estimated quantity revenues calculated for each meter size, and
18 for each month based on three-year average sales patterns and (2) adding this to
19 the estimated service charge revenues, calculated by taking the average number of
20 customers each year and multiplying it by the service charge. CWS’ method is
21 outlined in detail in Appendix A of Chapter 2 in DRA’s Bakersfield Report. DRA
22 does not recommend any changes to this method.

23 (b) Business, Multi-family, Public Authority, Industrial and Other

24 CWS calculates operating revenues for business, multifamily, public
25 authority, industrial, and other customers by (1) taking the sum of estimated
26 quantity revenues for each meter size, for each month based on three-year average

1 sales patterns and (2) adding the quantity revenues to the estimated service charge
2 revenues, calculated by multiplying the forecasted average number of customers
3 by the meter charges. CWS' method is outlined in detail in Appendix A to
4 Chapter 2 of DRA's Bakersfield Report. DRA does not recommend any changes
5 to this method.

6 **4) Unaccounted for Water**

7 CWS estimates 23.91% unaccounted for water in Redwood Valley, Coast
8 Springs division, and 28.29% unaccounted for water in Redwood Valley, Lucerne
9 division. These estimates are based upon the five-year average recorded
10 unaccounted for water in each division. DRA agrees. CWS estimates 28.4%
11 unaccounted for water in Redwood Valley, Unified division. However, in
12 response to data request MD7-013, questions 16 and 17, CWS stated that the data
13 used to calculate unaccounted for water was missing for 2003-2004, and 2008.
14 Because of a lack of accurate information regarding unaccounted for water, DRA
15 recommends 8% unaccounted for water. This recommendation is consistent with
16 CWS' proposal for all districts with flat meters where accurate information about
17 the amount of water sold is unavailable.

18 **D. CONCLUSION**

19 **1) Average Active Service Connections**

20 The Commission should adopt DRA's recommended number of service
21 connections.

22 **2) Metered Sales and Supply**

23 DRA agrees with CWS' proposal.

24 **3) Operating Revenues**

25 DRA accepts CWS' method for calculating operating revenues, with the
26 following modifications for illustrative purposes: for all customer classes, DRA

1 used the present rates given by CWS at the time it filed the GRC application to
 2 illustrate Operating Revenues at Present Rates for 2011 and 2012. Also, DRA
 3 used the proposed rates from CWS' GRC application filed in July 2009 to
 4 calculate Operating Revenues at Proposed Rates. Appendix A to Chapter 2 for
 5 DRA's Bakersfield report in section B. 1. and B. 2. provides a detailed
 6 explanation.

7 **4) Unaccounted for Water**

8 DRA agrees with CWS' estimate of unaccounted for water, based upon the
 9 five-year average recorded unaccounted for water for the Coast Springs and
 10 Lucerne divisions. For the Unified division, CWS did not provide accurate data to
 11 calculate the five-year average, and DRA recommends 8% unaccounted for
 12 water.

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
 COAST SPRINGS RATE AREA
 REDWOOD VALLEY DISTRICT
 WATER SALES PER AVERAGE CUSTOMER

TEST YEAR		2011		
Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(CCF/CONN./YR)				
Residential	30.1	30.1	0.0	0.0%
Business	158.7	158.7	0.0	0.0%
Multiple Family	0.0	0.0	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
13 Res. Flat Rate	0.0	0.0	0.0	0.0%

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	247	247	0	0.0%
Business	5	5	0	0.0%
Multiple Family	0	0	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	2	2	0	0.0%
Other	0	0	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	254	254	0	0.0%
<u>Flat Rate Connections</u>				
Residential Flat	0	0	0	0.0%
Private Fire Protection	0	0	0	0.0%
Public Fire Protection	0	0	0	0.0%
Total flat rate connections	0	0	0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	254	254	0	0.0%
Exclude Fire Protection	254	254	0	0.0%

1

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	248	248	0	0.0%
Business	5	5	0	0.0%
Multiple Family	0	0	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	2	2	0	0.0%
Other	0	0	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	255	255	0	0.0%
<u>Flat Rate Connections</u>				
Residential Flat	0	0	0	0.0%
Private Fire Protection	0	0	0	0.0%
Public Fire Protection	0	0	0	0.0%
Total flat rate connections	0	0	0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	255	255	0	0.0%
Exclude Fire Protection	255	255	0	0.0%

1

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA (KCCF/YEAR)	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Sales</u>				
Residential	7.4	7.4	0.0	0.0%
Business	0.8	0.8	0.0	0.0%
Multiple Family	0.0	0.0	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	8.2	8.2	0.0	0.0%
<u>Flat Rate Sales</u>				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 23.91%	2.6	2.6	0.0	0.6%
Total delivered	10.8	10.8	0.0	0.1%
<u>Supply</u>				
Company Wells	10.8	10.8	0.0	0.0%
Total production	10.8	10.8	0.0	0.0%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(KCCF/YEAR)				
<u>Metered Sales</u>				
Residential	7.5	6.3	-1.1	-15.0%
Business	0.8	0.7	-0.1	-15.0%
Multiple Family	0.0	0.0	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	8.3	7.0	(1.2)	-15.0%
<u>Flat Rate Sales</u>				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 23.91%	2.6	2.2	(0.4)	-15.2%
Total delivered	10.9	9.2	(1.6)	-15.1%
<u>Supply</u>				
Company Wells	10.9	9.2	(1.7)	-15.6%
Total production	10.9	9.2	(1.7)	-15.6%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	129.8	129.8	0.0	0.0%
Business	13.8	13.8	0.0	0.0%
Multiple Family	0.0	0.0	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	143.6	143.6	0.0	0.0%
<u>Non-WRAM Revenues</u>				
Service Charges	113.8	113.8	0.0	0.0%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	0.0	0.0	0.0	0.0%
Public Fire Protection	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Total Flat Rate	113.8	113.8	0.0	0.0%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	257.4	257.5	0.1	0.0%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	398.4	398.4	0.0	0.0%
Business	42.5	42.5	0.0	0.0%
Multiple Family	0.0	0.0	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	440.9	440.9	0.0	0.0%
<u>Non-WRAM Revenues</u>				
Service Charges	214.7	214.7	0.0	0.0%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	0.0	0.0	0.0	0.0%
Public Fire Protection	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Total Flat Rate	214.7	214.7	0.0	0.0%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	655.6	655.6	0.0	0.0%

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(CCF/CONN./YR)				
Residential	80.4	80.4	0.0	0.0%
Business	244.1	244.1	0.0	0.0%
Multiple Family	1,542.3	1,542.3	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	288.9	288.9	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
1 Res. Flat Rate	0.0	0.0	0.0	0.0%

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	1,210	1,210	0	0.0%
Business	46	46	0	0.0%
Multiple Family	14	14	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	9	9	0	0.0%
Other	0	0	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	1,279	1,279	0	0.0%
<u>Flat Rate Connections</u>				
Residential Flat	0	0	0	0.0%
Private Fire Protection	0	0	0	0.0%
Public Fire Protection	0	0	0	0.0%
Total flat rate connections	0	0	0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	1,279	1,279	0	0.0%
Exclude Fire Protection	1,279	1,279	0	0.0%

1

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	1,216	1,216	0	0.0%
Business	45	45	0	0.0%
Multiple Family	14	14	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	9	9	0	0.0%
Other	0	0	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	1,284	1,284	0	0.0%
<u>Flat Rate Connections</u>				
Residential Flat	0	0	0	0.0%
Private Fire Protection	0	0	0	0.0%
Public Fire Protection	0	0	0	0.0%
Total flat rate connections	0	0	0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	1,284	1,284	0	0.0%
Exclude Fire Protection	1,284	1,284	0	0.0%

1

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA (KCCF/YEAR)	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Sales</u>				
Residential	97.3	97.3	0.0	0.0%
Business	11.2	11.2	0.0	0.0%
Multiple Family	21.6	21.6	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	2.6	2.6	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	132.7	132.7	0.0	0.0%
<u>Flat Rate Sales</u>				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 28.29%	52.3	52.3	(0.0)	-0.1%
Total delivered	185.0	185.0	(0.0)	0.0%
<u>Supply</u>				
Purchases - Yolo County	185.0	185.0	0.0	0.0%
Total production	185.0	185.0	0.0	0.0%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA (KCCF/YEAR)	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Sales</u>				
Residential	97.8	96.3	-1.5	-1.5%
Business	11.0	10.8	-0.2	-1.5%
Multiple Family	21.6	21.3	-0.3	-1.5%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	2.6	2.6	0.0	-1.5%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	132.9	130.9	(2.0)	-1.5%
<u>Flat Rate Sales</u>				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 28.29%	52.4	51.6	(0.8)	-1.6%
Total delivered	185.4	182.5	(2.8)	-1.5%
<u>Supply</u>				
Purchases - Yolo County	185.3	182.5	(2.8)	-1.5%
Total production	185.3	182.5	(2.8)	-1.5%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	529.7	529.7	0.0	0.0%
Business	61.1	61.1	0.0	0.0%
Multiple Family	117.6	117.6	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	14.2	14.2	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	722.6	722.6	0.0	0.0%
<u>Non-WRAM Revenues</u>				
Service Charges	520.2	520.2	0.0	0.0%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	0.0	0.0	0.0	0.0%
Public Fire Protection	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Total Flat Rate	520.2	520.2	0.0	0.0%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	1,242.8	1,242.8	0.0	0.0%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	927.4	927.4	0.0	0.0%
Business	107.0	107.0	0.0	0.0%
Multiple Family	205.8	205.8	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	24.8	24.8	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	1,265.0	1,265.1	0.1	0.0%
<u>Non-WRAM Revenues</u>				
Service Charges	660.2	660.2	0.0	0.0%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	0.0	0.0	0.0	0.0%
Public Fire Protection	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Total Flat Rate	660.2	660.2	0.0	0.0%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	1,925.2	1,925.4	0.2	0.0%

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(CCF/CONN./YR)				
Residential	81.9	81.9	0.0	0.0%
Business	202.7	202.7	0.0	0.0%
Multiple Family	813.6	813.6	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	166.7	83.3	(83.3)	-50.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
1 Res. Flat Rate	0.0	0.0	0.0	0.0%

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	410	410	0	0.0%
Business	7	7	0	0.0%
Multiple Family	3	3	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	3	6	3	100.0%
Other	0	0	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	423	426	3	0.7%
<u>Flat Rate Connections</u>				
Residential Flat	0	0	0	0.0%
Private Fire Protection	0	0	0	0.0%
Public Fire Protection	0	0	0	0.0%
Total flat rate connections	0	0	0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	423	426	3	0.7%
Exclude Fire Protection	423	426	3	0.7%

1

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Connections</u>				
Residential	409	409	0	0.0%
Business	7	7	0	0.0%
Multiple Family	3	3	0	0.0%
Industrial	0	0	0	0.0%
Public Authority	3	7	4	133.3%
Other	0	0	0	0.0%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	422	426	4	0.9%
<u>Flat Rate Connections</u>				
Residential Flat	0	0	0	0.0%
Private Fire Protection	0	0	0	0.0%
Public Fire Protection	0	0	0	0.0%
Total flat rate connections	0	0	0	0.0%
<u>Total Active Connections</u>				
Include Fire Protection	422	426	4	0.9%
Exclude Fire Protection	422	426	4	0.9%

1

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA (KCCF/YEAR)	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Sales</u>				
Residential	33.6	33.6	0.0	0.0%
Business	1.4	1.4	0.0	0.0%
Multiple Family	2.4	2.4	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.5	0.5	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	37.9	37.9	0.0	0.0%
<u>Flat Rate Sales</u>				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 28.36%	15.0	15.0	(0.0)	-0.1%
Total delivered	53.0	52.9	(0.0)	0.0%
<u>Supply</u>				
Company Wells	50.1	50.1	0.0	0.0%
Purchases - Rancho Del Paradiso	2.8	2.8	0.0	0.0%
Total production	52.9	52.9	0.0	0.0%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA (KCCF/YEAR)	CWS	CWS exceeds DRA	
			Amount	%
<u>Metered Sales</u>				
Residential	33.5	33.0	-0.5	-1.5%
Business	1.4	1.4	0.0	-1.5%
Multiple Family	2.4	2.4	0.0	-1.5%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	0.5	0.5	0.0	-1.4%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	37.9	37.3	(0.6)	-1.5%
<u>Flat Rate Sales</u>				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 28.36%	15.0	14.8	(0.2)	-1.2%
Total delivered	52.8	52.1	(0.8)	-1.4%
<u>Supply</u>				
Company Wells	50.0	49.3	(0.7)	-1.4%
Purchases - Rancho Del Paradiso	2.8	2.8	0.0	0.0%
Total production	52.8	52.1	(0.7)	-1.3%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	223.5	223.5	0.0	0.0%
Business	9.4	9.4	0.0	0.0%
Multiple Family	16.2	16.2	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	3.3	3.3	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	252.4	252.4	0.0	0.0%
<u>Non-WRAM Revenues</u>				
Service Charges	233.5	243.4	9.9	4.2%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	0.0	0.0	0.0	0.0%
Public Fire Protection	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Total Flat Rate	233.5	243.4	9.9	4.2%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	485.9	495.9	10.0	2.1%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
<u>WRAM Revenues</u>				
Residential	497.3	497.3	0.0	0.0%
Business	21.0	21.0	0.0	0.0%
Multiple Family	36.1	36.1	0.0	0.0%
Industrial	0.0	0.0	0.0	0.0%
Public Authority	7.4	7.4	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	561.8	561.8	0.0	0.0%
<u>Non-WRAM Revenues</u>				
Service Charges	348.7	362.4	13.7	3.9%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	0.0	0.0	0.0	0.0%
Public Fire Protection	0.0	0.0	0.0	0.0%
Other	0.0	0.0	0.0	0.0%
Total Flat Rate	348.7	362.4	13.7	3.9%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	910.5	924.3	13.8	1.5%

1 CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES

2 A. INTRODUCTION

3 This Chapter presents DRA's analysis and recommendations on Operation
4 and Maintenance ("O&M") expenses in the Redwood Valley District of California
5 Water Service Company ("CWS") for Test Year 2011. The Redwood Valley
6 District consists of three independent ratemaking areas – Coast Springs, Lucerne,
7 and Unified rate areas. Table 3-A, Table 3-B, and Table 3-C show comparisons of
8 total expense estimates at present rates for Test Year for the Coast Springs,
9 Lucerne, and Unified rate areas, respectively.

10 **Table 3-A: Comparison of Total O&M Expense Estimates**

11 – **Coast Springs Rate Area**

Test Year 2011			
Items	DRA	CWS	CWS Exceeds DRA
O&M Expenses	\$154,200	\$169,700	\$15,500 or 10.1%

12

13 **Table 3-B: Comparison of Total O&M Expense Estimates**

14 – **Lucerne Rate Area**

Test Year 2011			
Items	DRA	CWS	CWS Exceeds DRA
O&M Expenses	\$555,800	\$625,700	\$69,900 or 12.6%

15

16

Table 3-C: Comparison of Total O&M Expense Estimates

– Unified Rate Area

Test Year 2011			
Items	DRA	CWS	CWS Exceeds DRA
O&M Expenses	\$219,900	\$240,800	\$20,900 or 9.5%

B. SUMMARY OF RECOMMENDATIONS

For the Coast Springs Area, DRA's estimate for Total O&M expenses for Test Year 2011 is \$154,200. CWS' Test Year 2011 estimate is \$169,700. CWS' estimate exceeds DRA's by \$15,500, or 10.1%. For the Lucerne Area, DRA's estimate for Total O&M expenses for Test Year 2011 is \$555,800. CWS' Test Year 2011 estimate is \$625,700. CWS' estimate exceeds DRA's by \$69,900, or 12.6%. For the Unified Area, DRA's estimate for Total O&M expenses for Test Year 2011 is \$219,900. CWS' Test Year 2011 estimate is \$240,800. CWS' estimate exceeds DRA's by \$20,900, or 9.5%. DRA recommends that the Commission adopt its O&M expense estimates for all three ratemaking areas.

C. DISCUSSION

COAST SPRINGS RATE AREA

DRA conducted an independent analysis of CWS' workpapers and methods of estimating O&M Expenses for Test Year 2011. CWS uses a five-year average of historical expenses adjusted for inflation as the basis for projecting Test Year 2011 with the exception of Purchased Chemicals, Purchased Power, Postage, Transportation, and Contracted Maintenance.

1 DRA utilizes multiple regression analyses and other methods including last
2 recorded year (2008) data adjusted for inflation and a five-year (2004-2008)
3 average of historical expenses adjusted for inflation to assess the reasonableness of
4 CWS' estimates.

5 Both DRA and CWS apply the various escalation factors, published by the
6 DRA Energy Cost of Service Branch ("ECOS"), dated May 31, 2009, to develop
7 the level of expenses. Tables 3-1 summarize DRA's recommended O&M
8 expenses and compare them to CWS' requests for Test Year 2011. Each expense
9 item listed is discussed below.

10 **1) OPERATION EXPENSES**

11 **(a) PURCHASED POWER**

12 Purchased Power is the cost of electricity from Pacific Gas and Electric
13 needed to operate a district, including the power used in pumping and delivering
14 water. Estimating Purchased Power expenses is a function of (a) the estimated
15 production and (b) the estimated cost per kilowatt hour ("KWH"), taking into
16 account the historical ratios of electricity used to the amount of water pumped.
17 Therefore, the cost of purchased power may vary with the changes in the estimates
18 of either production, cost per KWH of electricity, or a combination of both.

19 CWS generally estimates cost per KWH using one of the following two
20 methods – (1) if a linear regression analysis shows a strong relationship between
21 cost per KWH and timing, CWS uses its linear regression forecast methodology of
22 cost per KWH based on a two-year 12-month rolling average of actual cost per
23 KWH for estimating Purchased Power expenses; otherwise, (2) CWS uses a
24 two-year average of 12-month rolling averages of actual cost per KWH in
25 estimating Purchased Power expenses.

26 Based on DRA's review of CWS' supporting workpapers, CWS' cost per
27 KWH of \$0.17206 is based on two year (1998-1999) 12-month rolling averages

1 forecast methodology³. CWS' Purchased Power estimate is \$6,500 in Test Year
2 2011. DRA accepts CWS' methodology and estimate of Purchased Power
3 expenses, and therefore recommends that the Commission adopt CWS' estimate.

4 (b) PURCHASED CHEMICALS

5 CWS' estimate of Purchased Chemicals expenses is \$1,700 in Test Year
6 2011 based on a four-year (2005-2008) average cost per unit of production
7 adjusted for inflation and the estimated production. DRA's estimate is \$1,600 in
8 Test Year based on a five-year (2004-2008) average cost per unit of production
9 adjusted for inflation and the DRA estimated water production. Using a five-year
10 average would better reflect CWS' historical trends. Difference between DRA
11 and CWS estimates is due to differences in estimating average cost per unit. DRA
12 recommends that the Commission adopt its estimate.

13 (c) OPERATION PAYROLL

14 For Operations Payroll expenses please refer to the Payroll Report.

15 (d) POSTAGE

16 CWS' estimate of Postage expenses is \$1,700 in Test Year 2011. CWS'
17 postage cost is a function of (a) the 2008's unit cost per customer service or
18 connection, (b) the estimated numbers of connection, and (c) a 4.8% increase in
19 postal first-class rate that was effective May 11, 2009⁴, plus inflation. DRA
20 adjusts CWS' estimate by (1) reducing the postal rate increase from 4.80% to
21 3.17% in May 11, 2009, and (2) excluding the escalation factors from DRA's
22 postage expenses estimate. Since CWS primarily utilizes bulk rates (Classes A5,
23 A6, A7, and A8) for its mailings, DRA computed the average bulk rate increase
24 based on reviewing the bulk rates schedule. DRA concludes the average bulk rate

³ There were no more updated data of cost per KWH available to be used in forecasting.

⁴ According to CWS' General Report, dated July 1, 2009, p25, 'District Postage'

1 increase is 3.17%, which is what DRA uses in its estimates. Also, as future postal
2 rate increases are unknown, an escalation factor should be excluded from the
3 calculation. DRA's estimate of Postage expenses is \$1,500 for Test Year 2011,
4 which is \$200 less than CWS' estimate. DRA recommends that the Commission
5 adopt its estimate.

6 (e) OPERATION TRANSPORTATION

7 According to last year's recorded data ratios, total Transportation expense
8 includes three components: Operation, Maintenance, and Administration and
9 General ("A&G").

10 CWS' estimate for total Transportation expense is \$22,300 in Test Year
11 2011 based on the last recorded year (2008) adjusted for inflation. The total is
12 broken down as \$18,000, \$4,100, and \$200 for Operation, Maintenance, and
13 A&G, respectively. CWS' estimated total Transportation expenses include \$7,300
14 of costs associated with one additional vehicle requested by CWS in the year
15 2009.

16 DRA's estimate for total Transportation expense is \$14,800 in Test Year
17 2011 based on the last recorded year (2008) adjusted for inflation. The total is
18 broken down as \$12,000, \$2,700, and \$100 for Operation, Maintenance, and
19 A&G, respectively. DRA excluded the costs associated with one additional
20 vehicle requested by CWS in the year 2009 based on the recommendation by DRA
21 payroll witness that no additional new employees be allowed. Please refer to the
22 Payroll Report for details. DRA recommends that the Commission adopt its
23 estimate.

24 (f) UNCOLLECTIBLES

25 An estimate of Uncollectible expenses is a function of (a) the estimated
26 total revenue and (b) a five-year average (when appropriate) of historical
27 uncollectible rates. DRA agrees with CWS' methodology in estimating
28 Uncollectible expenses. CWS estimated no Uncollectible expenses for Test Year

1 2011 based on a five-year (2004-2008) average of uncollectible rate of 0% (i.e., no
2 recorded historical uncollectible expenses from 2004 through 2008). DRA accepts
3 CWS' estimate of Uncollectible expenses, and therefore recommends that the
4 Commission adopt CWS' estimate.

5 **(g) SOURCE OF SUPPLY**

6 CWS' estimate for Source of Supply expenses is \$100 in Test Year 2011
7 based on a five-year (2004 to 2008) average adjusted for inflation. DRA
8 concludes that CWS' methodology and estimate are reasonable, and therefore
9 recommends that the Commission adopt CWS' estimate.

10 **(h) PUMPING EXPENSES**

11 Pumping expenses include the expenses of waste oil disposal, inspection of
12 storage tanks related to pumping, testing and cleaning pumps and motors including
13 supplies such as lubricants, fuses, gaskets, charts and the like, and power used for
14 pumping.⁵ CWS' estimate for Pumping expenses is \$43,600 in Test Year 2011
15 based on a five-year average adjusted for inflation. DRA concludes that CWS'
16 methodology and estimate are reasonable, and therefore recommends that the
17 Commission adopt CWS' estimate.

18 **(i) WATER TREATMENT**

19 Water Treatment expenses include expenses for operating filter and
20 treatment plants, chlorinating equipment, outside laboratory expenses, laboratory
21 supplies, postage on water samples, water quality notices and advertisements,
22 accrual for DPH fees including system inspections, water treatment operators'
23 tests and certification costs, hazardous material disposal, and environmental
24 handling and reporting.

⁵ Per CWS' response to DRA data request, RYY-005, Question 5, dated October 19, 2009.

1 For Water Treatment expenses, CWS' estimate is \$30,800 in Test Year
2 2011 based on the five-year (2004-2008) average adjusted for inflation. DRA
3 concludes that CWS' methodology and estimate are reasonable, and therefore
4 recommends that the Commission adopt CWS' estimate.

5 **(j) TRANSMISSION AND DISTRIBUTION**

6 Transmission and Distribution ("T&D") expenses include expenses
7 incurred in operating distribution reservoirs and tanks, including cleaning and
8 flushing, care of grounds, flushing of mains and services, potholing (digging to
9 verify depth and location of pipelines), corrosion tests, fire flow tests, locating and
10 operating valves and supplies necessary to operate the District's transmission and
11 distribution system. For T&D expenses, CWS' estimate is \$1,600 in Test Year
12 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA
13 concludes that CWS' methodology and estimate are reasonable, and therefore
14 recommends that the Commission adopt CWS' estimate.

15 **(k) CUSTOMER ACCOUNTING**

16 Customer Accounting expenses include all costs related to customer billing
17 such as bill stock, envelopes, billing inserts (except for conservation), fees paid to
18 collection agencies and pay stations, bank charges, alarm systems, telephone
19 charges including meter reading communication lines, janitorial services for the
20 commercial office, and other expenses related to billing customers. For Customer
21 Accounting expenses, CWS' estimate is \$4,400 for Test Year 2011 based on a
22 five-year average adjusted for inflation. DRA concludes that CWS' methodology
23 and estimate are reasonable, therefore recommends that the Commission adopt
24 CWS' estimate.

25 **(l) CONSERVATION EXPENSES**

26 For Conservation Expenses, please refer to the Conservation Expenses
27 report.

1 **2) MAINTENANCE EXPENSES**

2 **(a) MAINTENANCE PAYROLL**

3 For Maintenance Payroll Expenses, please refer to the Payroll report.

4 **(b) MAINTENANCE TRANSPORTATION**

5 For an estimate of Maintenance Transportation expense, please refer to
6 Section (e) of this Chapter.

7 **(c) STORES**

8 CWS estimates no Stores expenses for Test Year 2011 based on a five-year
9 (2004-2008) average adjusted for inflation. DRA concludes that CWS'
10 methodology and estimate are reasonable, and therefore recommends that the
11 Commission adopt CWS' estimate.

12 **(d) CONTRACTED MAINTENANCE**

13 CWS' estimate for Contracted Maintenance expenses is \$13,500 in Test
14 Year 2011 based on the last recorded year (2008) adjusted for inflation. DRA
15 concludes that CWS' methodology and estimate are reasonable, and therefore
16 recommends that the Commission adopt CWS' estimate.

17 **LUCERNE RATE AREA**

18 DRA conducted an independent analysis of CWS' workpapers and methods
19 of estimating O&M Expenses for Test Year 2011. CWS uses a five-year average
20 of historical expenses adjusted for inflation as the basis for projecting Test Year
21 2011 with the exception of Purchased Water, Purchased Chemicals, Purchased
22 Power, Postage, and Transportation.

23 DRA utilizes multiple regression analyses and other methods including last
24 recorded year (2008) data adjusted for inflation and a five-year (2004-2008)

1 average of historical expenses adjusted for inflation to assess the reasonableness of
2 CWS' estimates.

3 Both DRA and CWS apply the various escalation factors, published by the
4 DRA Energy Cost of Service Branch ("ECOS"), dated May 31, 2009, to develop
5 the level of expenses. Table 3-1 summarizes DRA's recommended O&M
6 expenses and compares them to CWS' requests for Test Year 2011. Each expense
7 item listed is discussed below.

8 **3) OPERATION EXPENSES**

9 **(a) PURCHASED WATER**

10 CWS estimates Purchased Water in Test Year 2011 to be \$22,300, which is
11 calculated by multiplying the quantity of Purchased Water by the unit cost per acre
12 foot per CWS' contract with Yolo County Flood Control and Water Conservation
13 District. After reviewing CWS' supporting documents, DRA accepts CWS'
14 methodology. DRA's estimate is \$17,500 in Test Year. Difference between
15 DRA's and CWS' estimates is due to differences in estimated Purchased Water.
16 DRA recommends that the Commission adopt its estimate.

17 **(b) PURCHASED POWER**

18 Purchased Power is the cost of electricity from Pacific Gas and Electric
19 needed to operate a district, including the power used in pumping and delivering
20 water. Estimating Purchased Power expenses is a function of (a) the estimated
21 production and (b) the estimated cost per kilowatt hour ("KWH"), taking into
22 account the historical ratios of electricity used to the amount of water pumped.
23 Therefore, the cost of purchased power may vary with the changes in the estimates
24 of either production, cost per KWH of electricity, or a combination of both.

25 CWS generally estimates cost per KWH using one of the following two
26 methods – (1) if a linear regression analysis shows a strong relationship between
27 cost per KWH and timing, CWS uses its linear regression forecast methodology of

1 cost per KWH based on a two-year 12-month rolling average of actual cost per
2 KWH for estimating Purchased Power expenses; otherwise, (2) a two-year average
3 of 12-month rolling averages of actual cost per KWH is used in estimating
4 Purchased Power expenses.

5 Based on DRA's review of CWS' supporting workpapers, CWS' cost per
6 KWH of \$0.15844 is based on two-year (2003-2004) 12-month rolling averages
7 forecast methodology. DRA accepted CWS' methodology in estimating
8 purchased power costs.

9 CWS' Purchased Power estimate is \$49,600 in Test Year 2011. DRA
10 estimates the Purchased Power expenses to be \$38,800, which is \$10,800 less than
11 CWS' estimate. The difference between DRA and CWS estimates is due to
12 differences in water production estimates. DRA recommends that the
13 Commission adopt its estimate.

14 (c) PURCHASED CHEMICALS

15 CWS' estimate of Purchased Chemicals expenses is \$45,500 in Test Year
16 2011 based on a three-year (2006-2008) average cost per unit of production
17 adjusted for inflation and the estimated production. DRA's estimate is \$41,200 in
18 Test Year based on a five-year (2004-2008) average cost per unit of production
19 adjusted for inflation and the DRA estimated water production. Using a five-year
20 average would better reflect CWS' historical trends. Difference between DRA
21 and CWS estimates is due to differences in estimating average cost per unit. DRA
22 recommends that the Commission adopt its estimate.

23 (d) OPERATION PAYROLL

24 For Operations Payroll expenses please refer to the Payroll Report.

25 (e) POSTAGE

26 CWS' estimate of Postage expenses is \$7,200 in Test Year 2011. CWS'
27 postage cost is a function of (a) the 2008's unit cost per customer service or

1 connection, (b) the estimated numbers of connection, and (c) a 4.8% increase in
2 postal first-class rate that was effective May 11, 2009⁶, plus inflation. DRA
3 adjusts CWS' estimate by (1) reducing the postal rate increase from 4.80% to
4 3.17% in May 11, 2009, and (2) excluding the escalation factors from DRA's
5 postage expense estimate. Since CWS primarily utilizes bulk rates (Classes A5,
6 A6, A7, and A8) for its mailings, DRA computed the average bulk rate increase
7 based on reviewing the bulk rates schedule. DRA concludes the average bulk rate
8 increase is 3.17%, which is what DRA uses in its estimates. Also, as future postal
9 rate increases are unknown, an escalation factor should be excluded from the
10 calculation. DRA's estimate of Postage expenses is \$6,700 for Test Year 2011,
11 which is \$500 less than CWS' estimate. DRA recommends that the Commission
12 adopt its estimate.

13 (f) OPERATION TRANSPORTATION

14 According to last year's recorded data ratios, total Transportation expense
15 includes three components: Operation, Maintenance, and Administration and
16 General ("A&G").

17 CWS' estimate for total Transportation expense is \$30,800 in Test Year
18 2011 based on the last recorded year (2008) adjusted for inflation. The total is
19 broken down as \$23,000, \$7,100, and \$700 for Operation, Maintenance, and
20 A&G, respectively.⁷ CWS did not include any new vehicle expense in its
21 Transportation expense estimates.

22 DRA's estimate for total Transportation expense is \$27,400 in Test Year
23 2011 based on the five-year (2004-2008) average adjusted for inflation. The total
24 is broken down as \$20,500, \$6,300, and \$600 for Operation, Maintenance, and

⁶ According to CWS' General Report, dated July 1, 2009, p25, 'District Postage'

⁷ The sum of allocated Transportation expenses to Operation, Maintenance, and A&G does not agree with the total Transportation expense due to rounding. CWS' Amounts present here are based strictly on CWS' original application workpaper, Table 5-B4.

1 A&G, respectively. Using a five-year average methodology would better reflect
2 CWS' historical trends. Therefore, DRA recommends that the Commission adopt
3 its estimate.

4 (g) UNCOLLECTIBLES

5 An estimate of Uncollectible expenses is a function of (a) the estimated
6 total revenue and (b) a five-year average (when appropriate) of historical
7 uncollectible rates. DRA agrees with CWS' methodology in estimating
8 Uncollectible expenses. CWS' estimate for Uncollectible expenses is \$13,200 in
9 Test Year 2011 based on a five-year (2004-2008) average of uncollectible rate of
10 1.06087%. DRA's estimate for uncollectible expenses is also \$13,200. DRA
11 recommends that the Commission adopt its estimate.

12 (h) SOURCE OF SUPPLY

13 CWS' estimate for Source of Supply expenses is \$6,500 in Test Year 2011
14 based on a five-year (2004 to 2008) average adjusted for inflation. DRA
15 concludes that CWS' methodology and estimate are reasonable, and therefore
16 recommends that the Commission adopt CWS' estimate.

17 (i) PUMPING EXPENSES

18 Pumping expenses include the expenses of waste oil disposal, inspection of
19 storage tanks related to pumping, testing and cleaning pumps and motors including
20 supplies such as lubricants, fuses, gaskets, charts and the like, and power used for
21 pumping.⁸ CWS' estimate for Pumping expenses is \$800 in Test Year 2011 based
22 on a five-year (2004-2008) average adjusted for inflation. DRA concludes that
23 CWS' methodology and estimate are reasonable, and therefore recommends that
24 the Commission adopt CWS' estimate.

⁸ Per CWS' response to DRA data request, RYY-005, Question 5, dated October 19, 2009.

1 **(j) WATER TREATMENT**

2 Water Treatment expenses include expenses for operating filter and
3 treatment plants, chlorinating equipment, outside laboratory expenses, laboratory
4 supplies, postage on water samples, water quality notices and advertisements,
5 accrual for DPH fees including system inspections, water treatment operators’
6 tests and certification costs, hazardous material disposal, and environmental
7 handling and reporting.

8 For Water Treatment expenses, CWS’ estimate is \$33,500 in Test Year
9 2011 based on the five-year (2004-2008) average adjusted for inflation. DRA
10 concludes that CWS’ methodology and estimate are reasonable, and therefore
11 recommends that the Commission adopt CWS’ estimate.

12 **(k) TRANSMISSION AND DISTRIBUTION**

13 Transmission and Distribution (“T&D”) expenses include expenses
14 incurred in operating distribution reservoirs and tanks, including cleaning and
15 flushing, care of grounds, flushing of mains and services, potholing (digging to
16 verify depth and location of pipelines), corrosion tests, fire flow tests, locating and
17 operating valves and supplies necessary to operate the District’s transmission and
18 distribution system. For T&D expenses, CWS’ estimate is \$10,200 in Test Year
19 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA
20 concludes that CWS’ methodology and estimate are reasonable, therefore
21 recommends that the Commission adopt CWS’ estimate.

22 **(l) CUSTOMER ACCOUNTING**

23 Customer Accounting expenses include all costs related to customer billing
24 such as bill stock, envelopes, billing inserts (except for conservation), fees paid to
25 collection agencies and pay stations, bank charges, alarm systems, telephone
26 charges including meter reading communication lines, janitorial services for the
27 commercial office, and other expenses related to billing customers. For Customer

Accounting expenses, CWS' estimate is \$39,300 for Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(m) CONSERVATION EXPENSES

For Conservation Expenses, please refer to the Conservation Expenses report.

4) MAINTENANCE EXPENSES

(a) MAINTENANCE PAYROLL

For Maintenance Payroll Expenses, please refer to the Payroll report.

(b) MAINTENANCE TRANSPORTATION

For an estimate of Maintenance Transportation expense, please refer to Section (f) of this Chapter.

(c) STORES

CWS' estimate for Stores expenses is \$200 in Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(d) CONTRACTED MAINTENANCE

CWS' estimate for Contracted Maintenance expenses is \$53,900 in Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

1 **UNIFIED RATE AREA**

2 DRA conducted an independent analysis of CWS’ workpapers and methods
3 of estimating O&M Expenses for Test Year 2011. CWS uses a five-year average
4 of historical expenses adjusted for inflation as the basis for projecting Test Year
5 2011 with the exception of Purchased Water, Purchased Chemicals, Purchased
6 Power, Postage, Transportation, and Contracted Maintenance.

7 DRA utilizes multiple regression analyses and other methods including last
8 recorded year (2008) data adjusted for inflation and a five-year (2004-2008)
9 average of historical expenses adjusted for inflation to assess the reasonableness of
10 CWS’ estimates.

11 Both DRA and CWS apply the various escalation factors, published by the
12 DRA Energy Cost of Service Branch (“ECOS”), dated May 31, 2009, to develop
13 the level of expenses. Table 3-1 summarizes DRA’s recommended O&M
14 expenses and compares them to CWS’ requests for Test Year 2011. Each expense
15 item listed is discussed below.

16 **5) OPERATION EXPENSES**

17 **(a) PURCHASED WATER**

18 CWS estimates Purchased Water in Test Year 2011 to be \$15,500. CWS’
19 Purchased Water expenses consist of two components: (i) the Base Rate Service
20 Charge, and (ii) the water usage component, which was calculated by multiplying
21 the quantity of Purchased Water by the usage rate that was specified by the
22 Sweetwater Springs Water District. After reviewing CWS’ supporting documents,
23 DRA concludes that CWS’ methodology and estimate are reasonable, and
24 therefore recommends that the Commission adopt CWS’ estimate.

1 **(b) PURCHASED POWER**

2 Purchased Power is the cost of electricity from Pacific Gas and Electric
3 needed to operate a district, including the power used in pumping and delivering
4 water. Estimating Purchased Power expenses is a function of (a) the estimated
5 production and (b) the estimated cost per kilowatt hour (“KWH”), taking into
6 account the historical ratios of electricity used to the amount of water pumped.
7 Therefore, the cost of purchased power may vary with the changes in the estimates
8 of either production, cost per KWH of electricity, or a combination of both.

9 CWS generally estimates cost per KWH using one of the following two
10 methods – (1) if a linear regression analysis shows a strong relationship between
11 cost per KWH and timing, CWS uses its linear regression forecast methodology of
12 cost per KWH based on a two-year 12-month rolling average of actual cost per
13 KWH for estimating Purchased Power expenses; otherwise, (2) a two-year average
14 of 12-month rolling averages of actual cost per KWH is used in estimating
15 Purchased Power expenses.

16 Based on DRA’s review of CWS’ supporting workpapers, CWS’ cost per
17 KWH of \$0.15322 is based on two year (1998-1999) 12-month rolling averages
18 forecast methodology. CWS’ Purchased Power estimate is \$13,600 in Test Year
19 2011. DRA concludes that CWS’ methodology and estimate are reasonable, and
20 therefore recommends that the Commission adopt CWS’ estimate.

21 **(c) PURCHASED CHEMICALS**

22 CWS’ estimate Purchased Chemicals expenses is \$1,900 in Test Year 2011
23 based on a two-year (2007-2008) average cost per unit of production adjusted for
24 inflation and the estimated production. DRA concludes that CWS’ methodology
25 and estimate are reasonable, and therefore recommends that the Commission adopt
26 CWS’ estimate.

1 **(d) OPERATIONS PAYROLL**

2 For Operations Payroll expenses please refer to the Payroll Report.

3 **(e) POSTAGE**

4 CWS' estimate of Postage expenses is \$3,500 in Test Year 2011. CWS'
5 postage cost is a function of (a) the 2008's unit cost per customer service or
6 connection, (b) the estimated numbers of connection, and (c) a 4.8% increase in
7 postal first-class rate that was effective May 11, 2009², plus inflation. DRA
8 adjusts CWS' estimate by (1) reducing the postal rate increase from 4.80% to
9 3.17% in May 11, 2009, and (2) excluding the escalation factors from DRA's
10 postage expense estimate. Since CWS primarily utilizes bulk rates (Classes A5,
11 A6, A7, and A8) for its mailings, DRA computed the average bulk rate increase
12 based on reviewing the bulk rates schedule. DRA concludes the average bulk rate
13 increase is 3.17%, which is what DRA uses in its estimates. Also, as future postal
14 rate increases are unknown, an escalation factor should not be excluded from the
15 calculation. DRA's estimate of Postage expenses is \$3,200 for Test Year 2011,
16 which is \$300 less than CWS' estimate. DRA recommends that the Commission
17 adopt its estimate.

18 **(f) OPERATION TRANSPORTATION**

19 According to last year's recorded data ratios, total Transportation expense
20 includes three components: Operation, Maintenance, and Administration and
21 General ("A&G").

22 CWS' estimate for total Transportation expense is \$20,600 in Test Year
23 2011 based on the last recorded year (2008) adjusted for inflation. The total is
24 broken down as \$9,300, \$11,000, and \$300 for Operation, Maintenance, and

² According to CWS' General Report, dated July 1, 2009, p25, 'District Postage'

1 A&G, respectively. CWS did not include any new vehicle expense in its
2 Transportation expense estimates.

3 DRA's estimate for total Transportation expense is \$16,600 in Test Year
4 2011 based on the five-year (2004-2008) adjusted for inflation. The total is
5 broken down as \$7,500, \$8,800, and \$200 for Operations, Maintenance, and A&G,
6 respectively.¹⁰ Using a five-year average would better reflect CWS' historical
7 trends. DRA recommends that the Commission adopt its estimate.

8 (g) UNCOLLECTIBLES

9 An estimate of Uncollectible expenses is a function of (a) the estimated
10 total revenue and (b) a five-year average (when appropriate) of historical
11 uncollectible rates. DRA agrees with CWS' methodology in estimating
12 Uncollectible expenses. CWS' estimate for Uncollectible expenses is \$2,200 in
13 Test Year 2011 based on a five-year (2004-2008) average of uncollectible rate of
14 0.44492%. DRA's estimate for uncollectible expenses is also \$2,200. DRA
15 recommends that the Commission adopt its estimate.

16 (h) SOURCE OF SUPPLY

17 CWS' estimate for Source of Supply expenses is \$2,100 in Test Year 2011
18 based on a five-year (2004 to 2008) average adjusted for inflation. DRA
19 concludes that CWS' methodology and estimate are reasonable, and therefore
20 recommends that the Commission adopt CWS' estimate.

21 (i) PUMPING EXPENSES

22 Pumping expenses include the expenses of waste oil disposal, inspection of
23 storage tanks related to pumping, testing and cleaning pumps and motors including
24 supplies such as lubricants, fuses, gaskets, charts and the like, and power used for

¹⁰ The sum of allocated Transportation expenses to Operation, Maintenance, and A&G does not agree with the total Transportation expense due to rounding.

1 pumping.¹¹ CWS' estimate for Pumping expenses is \$2,600 in Test Year 2011
2 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes
3 that CWS' methodology and estimate are reasonable, and therefore recommends
4 that the Commission adopt CWS' estimate.

5 (j) WATER TREATMENT

6 Water Treatment expenses include expenses for operating filter and
7 treatment plants, chlorinating equipment, outside laboratory expenses, laboratory
8 supplies, postage on water samples, water quality notices and advertisements,
9 accrual for DPH fees including system inspections, water treatment operators'
10 tests and certification costs, hazardous material disposal, and environmental
11 handling and reporting.

12 For Water Treatment expenses, CWS' estimate is \$14,800 in Test Year
13 2011 based on the five-year (2004-2008) average adjusted for inflation. DRA
14 concludes that CWS' methodology and estimate are reasonable, and therefore
15 recommends that the Commission adopt CWS' estimate.

16 (k) TRANSMISSION AND DISTRIBUTION

17 Transmission and Distribution ("T&D") expenses include expenses
18 incurred in operating distribution reservoirs and tanks, including cleaning and
19 flushing, care of grounds, flushing of mains and services, potholing (digging to
20 verify depth and location of pipelines), corrosion tests, fire flow tests, locating and
21 operating valves and supplies necessary to operate the District's transmission and
22 distribution system. For T&D expenses, CWS' estimate is \$7,000 in Test Year
23 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA
24 concludes that CWS' methodology and estimate are reasonable, therefore
25 recommends that the Commission adopt CWS' estimate.

¹¹ Per CWS' response to DRA data request, RYY-005, Question 5, dated October 19, 2009.

1 **(l) CUSTOMER ACCOUNTING**

2 Customer Accounting expenses include all costs related to customer billing
3 such as bill stock, envelopes, billing inserts (except for conservation), fees paid to
4 collection agencies and pay stations, bank charges, alarm systems, telephone
5 charges including meter reading communication lines, janitorial services for the
6 commercial office, and other expenses related to billing customers. For Customer
7 Accounting expenses, CWS' estimate is \$17,700 for Test Year 2011 based on a
8 five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS'
9 methodology and estimate are reasonable, therefore recommends that the
10 Commission adopt CWS' estimate.

11 **(m) CONSERVATION EXPENSES**

12 For Conservation Expenses, please refer to the Conservation Expenses
13 report.

14 **6) MAINTENANCE EXPENSES**

15 **(a) MAINTENANCE PAYROLL**

16 For Maintenance Payroll Expenses, please refer to the Payroll report.

17 **(b) MAINTENANCE TRANSPORTATION**

18 For an estimate of Maintenance Transportation expense, please refer to
19 Section (f) of this Chapter.

20 **(c) STORES**

21 CWS estimates no Stores expenses for Test Year 2011 based on a five-year
22 (2004-2008) average adjusted for inflation. DRA concludes that CWS'
23 methodology and estimate are reasonable, and therefore recommends that the
24 Commission adopt CWS' estimate.

1 **(d) CONTRACTED MAINTENANCE**

2 CWS' estimate for Contracted Maintenance expenses is \$28,400 in Test
3 Year 2011 based on the last recorded year (2008) adjusted for inflation. DRA
4 concludes that CWS' methodology and estimate are reasonable, and therefore
5 recommends that the Commission adopt CWS' estimate.

6 **D. CONCLUSION**

7 DRA recommends that the Commission adopt its O&M expense estimates.

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
OPERATION & MAINTENANCE EXPENSES

TEST YEAR		2011		
Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
	(Thousands of \$)			
At present rates				
Operating Revenues	257.4	257.5		
Uncollectible rate	<u>0.00000%</u>	<u>0.00000%</u>		
Uncollectibles	0.0	0.0	0.0	0.0%
<u>Operation Expenses</u>				
Purchased Water	0.0	0.0	0.0	0.0%
Replenishment Assessment	0.0	0.0	0.0	0.0%
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%
Purchased Power	6.5	6.5	0.0	0.0%
Purchased Chemicals	1.6	1.7	0.1	6.2%
Payroll	24.7	28.7	4.0	16.2%
Postage	1.5	1.7	0.2	13.3%
Transportation	12.0	18.0	6.0	50.0%
Uncollectibles	0.0	0.0	0.0	0.0%
Source of Supply	0.1	0.1	0.0	0.0%
Pumping	43.6	43.6	0.0	0.0%
Water Treatment	30.8	30.8	0.0	0.0%
Transmission & Distribution	1.6	1.6	0.0	0.0%
Customer Accounting	4.4	4.4	0.0	0.0%
Conservation	<u>1.8</u>	<u>4.1</u>	<u>2.3</u>	<u>127.8%</u>
Total Operation Expenses	128.6	141.2	12.6	9.8%
<u>Maintenance Expenses</u>				
Payroll	9.4	10.9	1.5	16.0%
Transportation	2.7	4.1	1.4	51.9%
Stores	0.0	0.0	0.0	0.0%
Contracted Maintenance	<u>13.5</u>	<u>13.5</u>	<u>0.0</u>	<u>0.0%</u>
Total Maintenance Expense	25.6	28.5	2.9	11.3%
Total O & M Expenses (incl uncoll)	154.2	169.7	15.5	10.1%
<u>At proposed rates</u>				
Operating Revenues	655.6	655.6		
Uncollectible rate	<u>0.00000%</u>	<u>0.00000%</u>		
Uncollectibles	0.0	0.0		
Total O & M Expenses (incl uncoll)	154.2	169.7	15.5	10.1%

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
OPERATION & MAINTENANCE EXPENSES

TEST YEAR		2011		CWS exceeds DRA	
Item	DRA	CWS	Amount	%	
(Thousands of \$)					
At present rates					
Operating Revenues	1,242.8	1,242.8			
Uncollectible rate	<u>1.06087%</u>	<u>1.06087%</u>			
Uncollectibles	13.2	13.2	0.0	0.0%	
<u>Operation Expenses</u>					
Purchased Water	17.5	22.3	4.8	27.4%	
Replenishment Assessment	0.0	0.0	0.0	0.0%	
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%	
Purchased Power	38.8	49.6	10.8	27.8%	
Purchased Chemicals	41.2	45.5	4.3	10.4%	
Payroll	252.3	285.9	33.6	13.3%	
Postage	6.7	7.2	0.5	7.5%	
Transportation	20.5	23.0	2.5	12.2%	
Uncollectibles	13.2	13.2	0.0	0.0%	
Source of Supply	6.5	6.5	0.0	0.0%	
Pumping	0.8	0.8	0.0	0.0%	
Water Treatment	33.5	33.5	0.0	0.0%	
Transmission & Distribution	10.2	10.2	0.0	0.0%	
Customer Accounting	39.3	39.3	0.0	0.0%	
Conservation	<u>9.1</u>	<u>21.0</u>	<u>11.9</u>	<u>130.8%</u>	
Total Operation Expenses	489.6	558.0	68.4	14.0%	
<u>Maintenance Expenses</u>					
Payroll	5.8	6.5	0.7	12.1%	
Transportation	6.3	7.1	0.8	12.7%	
Stores	0.2	0.2	0.0	0.0%	
Contracted Maintenance	<u>53.9</u>	<u>53.9</u>	<u>0.0</u>	<u>0.0%</u>	
Total Maintenance Expense	66.2	67.7	1.5	2.3%	
Total O & M Expenses (incl uncoll)	555.8	625.7	69.9	12.6%	
<u>At proposed rates</u>					
Operating Revenues	1,925.2	1,925.4			
Uncollectible rate	<u>1.06087%</u>	<u>1.06087%</u>			
Uncollectibles	<u>20.4</u>	<u>20.4</u>			
1 Total O & M Expenses (incl uncoll)	563.0	632.9	69.9	12.4%	

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
OPERATION & MAINTENANCE EXPENSES

TEST YEAR		2011		CWS exceeds DRA	
Item	DRA	CWS	Amount	%	
(Thousands of \$)					
At present rates					
Operating Revenues	485.9	495.9			
Uncollectible rate	<u>0.44492%</u>	<u>0.44492%</u>			
Uncollectibles	2.2	2.2	0.0	2.1%	
<u>Operation Expenses</u>					
Purchased Water	15.5	15.5	0.0	0.0%	
Replenishment Assessment	0.0	0.0	0.0	0.0%	
Groundwater Extraction Charges	0.0	0.0	0.0	0.0%	
Purchased Power	13.6	13.6	0.0	0.0%	
Purchased Chemicals	1.9	1.9	0.0	0.0%	
Payroll	86.2	98.2	12.0	13.9%	
Postage	3.2	3.5	0.3	9.4%	
Transportation	7.5	9.3	1.8	24.0%	
Uncollectibles	2.2	2.2	0.0	2.1%	
Source of Supply	2.1	2.1	0.0	0.0%	
Pumping	2.6	2.6	0.0	0.0%	
Water Treatment	14.8	14.8	0.0	0.0%	
Transmission & Distribution	7.0	7.0	0.0	0.0%	
Customer Accounting	17.7	17.7	0.0	0.0%	
Conservation	<u>3.1</u>	<u>7.1</u>	<u>4.0</u>	<u>129.0%</u>	
Total Operation Expenses	177.4	195.4	18.0	10.2%	
<u>Maintenance Expenses</u>					
Payroll	5.3	6.0	0.7	13.2%	
Transportation	8.8	11.0	2.2	25.0%	
Stores	0.0	0.0	0.0	0.0%	
Contracted Maintenance	<u>28.4</u>	<u>28.4</u>	<u>0.0</u>	<u>0.0%</u>	
Total Maintenance Expense	42.5	45.4	2.9	6.8%	
Total O & M Expenses (incl uncoll)	219.9	240.8	20.9	9.5%	
<u>At proposed rates</u>					
Operating Revenues	910.5	924.3			
Uncollectible rate	<u>0.44492%</u>	<u>0.44492%</u>			
Uncollectibles	<u>4.1</u>	<u>4.1</u>			
1 Total O & M Expenses (incl uncoll)	221.8	242.7	21.0	9.5%	

1 **CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES**

2 **A. INTRODUCTION**

3 This Chapter presents DRA's recommended expense levels for California
4 Water Service Company's ("CWS") 2011 Test Year Administrative and General
5 ("A&G") expenses for the Redwood Valley District which has three rate areas,
6 Coast Springs, Lucerne, and Unified.

7 The categories of A&G expenses cover general expenses including Payroll,
8 Transportation Expenses, Rent, Administration Charges Transfer, Workers'
9 Compensation, Nonspecific Expenses, Amortization of Limited Term Investments
10 and Dues and Donations Adjustment. Table 4-1 presents a comparison of total
11 expense estimates for Test Year 2011. At the end of this Chapter is a Table 4-1 for
12 each rate area.

13 DRA conducted an independent analysis of CWS' workpapers and methods
14 of estimating the A&G expenses. DRA analyzed CWS' application and exhibits,
15 supporting workpapers, CWS' data request responses, information provided in
16 meetings, field trips to CWS site locations, telephone conversations and e-mails.
17 In general, DRA uses a five-year (2004-2008) average to derive its A&G expense
18 estimates where it had differences with CWS. DRA also removes unusual
19 expenses recorded in certain years to arrive at a different total than CWS, in
20 particular for Nonspecific Expenses. DRA applies its escalation factors to all
21 A&G accounts.

22 **B. SUMMARY OF RECOMMENDATIONS**

23 For the Coast Springs Rate Area DRA's estimated total for A&G expenses
24 is \$63,100 for Test Year 2011. CWS' estimate for the same period is \$68,900 or
25 9.2% more than DRA. DRA's estimated total for A&G expenses is \$63,500 for

1 2012. CWS' estimate for the same time period is \$70,100 or 10.4% more than
2 DRA.

3 For the Lucerne Rate Area DRA's estimated total for A&G expenses is
4 \$233,000 for Test Year 2011. CWS' estimate for the same period is \$252,800 or
5 8.5% more than DRA. DRA's estimated total for A&G expenses is \$234,700 for
6 2012. CWS' estimate for the same period is \$23,700 or 10.1% more than DRA.

7 For the Unified Rate Area DRA's estimated total for A&G expenses is
8 \$106,400 for Test Year 2011. CWS' estimate for the same period is \$111,800 or
9 5.1% more than DRA. DRA's estimated total for A&G expenses is \$107,800 for
10 2012. CWS' estimate for the same period is \$114,600 or 6.3% more than DRA.

11 The difference between the forecasted expense levels of DRA and CWS is
12 the result of: 1) DRA's 2011 Test Year estimates of the various A&G activity
13 expenses; 2) account by account adjustments; 3) different methodologies; and 4)
14 the use of the May 2009 Energy Cost of Service Branch escalation factors memo
15 to derive the estimates as discussed below.

16 **C. DISCUSSION**

17 **1) COAST SPRINGS RATE AREA**

18 **(a) Payroll**

19 For A&G payroll expense, please refer to DRA's Payroll Report.

20 **(b) Employee Benefits**

21 There were no methodical differences between DRA and CWS in
22 calculating employee benefits. DRA's estimates for the accounts below are based
23 on (1) total payroll dollars, and (2) total number of employees. CWS' estimates
24 are also a function of these two factors. Per employee unit benefit costs were

developed by Milliman¹² and are based on a variety of actuarial assumptions. The underlying assumptions, except for the escalation factors, were accepted by DRA. Any differences are, therefore, attributable to different escalation factors and differing estimates for total company payroll and total General Office and district employees for 2011 and 2012.

DRA recommends the following amounts (thousands of dollars) for Account 795, Pensions and Benefits:

	<u>DRA</u>		<u>CWS</u>	
	<u>2011</u>	<u>2012</u>	<u>2011</u>	<u>2012</u>
Coast Springs Rate Area	\$35.8	\$36.0	\$39.3	\$40.0
Lucerne Rate Area	\$183.2	\$184.3	\$201.4	\$204.6
Unified Rate Area	\$61.9	\$62.3	\$68.0	\$69.1

All company benefits are accounted for in general operations and allocated to each of the districts using the four-factor method of allocation. In general benefit costs are a function of employee payroll dollars, and/or the number of employees. The following is a breakdown of the sub-accounts included in the total Account 795 Pensions and Benefits:

(i) Account 7951-1 Retirement Savings Plan.

CWS provides employees with a 401(k) program and matches 50% of employee contributions up to 8% of payroll or the statutory contribution limit, whichever is less. Therefore, CWS' maximum contribution is 4% of company payroll. However, not all employees participate in the program. Based on actual participation levels, CWS' matching contribution during the last five years, was

¹² Milliman is CWS' Pensions and Benefits actuarial consultants.

1 approximately 3%. This rate was used by CWS to forecast the test year amount,
2 and is in line (or comparable) to those offered by other California utilities.¹³

3 DRA estimated the test year contribution based on the five-year average
4 contribution percentage of 3%, which was multiplied by DRA's estimate of total
5 company payroll (in 2011 and 2012).

6 **(ii) Account 7951-2 Retirement Fund.**

7 CWS' pension funding estimate is based on an actuarial forecast from
8 Milliman. The Milliman analysis also reflects a unit cost per employee which
9 DRA and CWS applied to the estimated number of employees to arrive at the test
10 year's estimate. DRA and CWS' estimates differ because of different escalation
11 factors and different estimates for total employees in the General Office and all
12 districts.

13 The Milliman forecast is based on certain assumptions such as population
14 growth, payroll changes, and salary adjustments. The Milliman forecast also
15 assumes a long term rate on plan assets of 6.75%, and a discount rate of 5.75% for
16 the years 2011 through 2013. CWS follows FASB¹⁴ Statement of Financial
17 Accounting Standards (SFAS) No. 87, as modified by SFAS 132 and SFAS 158.¹⁵
18 CWS has followed SFAS 87 since it became effective in 1987. Prior to 1987,
19 CWS pension costs equaled the cash contributions to the pension plan determined
20 in accordance with ERISA.¹⁶ The test year projections are based on Milliman's
21 actuarial valuation as of January 1, 2009 for determining the Net Periodic Benefit

¹³ The 3% rate is in line with the 401(k) plans offered by San Jose Water, PG&E, Southern California Edison, and Sempra Energy. See the Milliman analysis, CWS General Report, Tab 12.

¹⁴ Financial Accounting Standards Board.

¹⁵ CWS' response to DRA Data Request JRC-2, Q.7.

¹⁶ Employment Retirement Income Security Act, or Federal law.

1 Cost under SFAS 87. The underlying pension costs assumptions were accepted by
2 DRA.

3 DRA was persuaded that CWS had taken appropriate steps to mitigate the
4 ratepayer impact of Plan costs. Further, CWS undertook the following measures
5 to avail itself of the benefits provided under (a) The Pension Protection Act of
6 2006, (PPA) and (b) The Worker, Retiree and Employer Recovery Act (WRERA)
7 of 2008:¹⁷

8 (1) CWS fully complied with PPA and WRERA. CWS
9 modified the actuarial cost method for purposes of determining the minimum
10 funding requirement to the Unit Credit method. CWS also adopted the use of
11 the “3-segment” interest rates (for the 2008 minimum funding requirement)
12 and the “full yield curve” (for the 2009 minimum funding requirement). The
13 actuarial valuations for 2008 and 2009 have shown that the contributions by
14 CWS will satisfy the minimum funding requirements as modified by PPA and
15 WRERA.

16 (2) In December 2008, CWS made an election to
17 voluntarily reduce its carryover balance (i.e., pre-PPA credit balance) of
18 \$1,537,616 as of January 1, 2008 to \$0, so that such amount could be included
19 in its plan assets. This was done in order to improve the plan’s funded
20 percentages under PPA. In 2009, CWS elected to use the “full yield curve” to
21 determine the funding target under PPA. This increased the plan’s funded
22 percentage for 2009.

23

¹⁷ CWS’ response to DRA Data Request JRC-2, Q.1.

1 **(iii) Account 7952- Group Health Insurance.**

2 CWS administers its own (self-insured) employee health care plan. The
3 cost of health insurance is based on actual claims experience and not outside
4 premium payments. The plans include Medical, Dental and Vision care. Further,
5 the plans are on the PPO model where employees are encouraged to use network
6 health care providers in order to minimize costs. CWS' estimate is based on an
7 actuarial forecast from Milliman and includes employee contributions of \$125 per
8 month. The Milliman forecast assumes that overall medical cost inflation will
9 continue to be 10% annually for the forecast period.¹⁸ The Milliman analysis also
10 reflects a unit cost per employee which DRA and CWS applied to the estimated
11 number of employees. DRA and CWS' estimate differs because of different
12 escalation factors and different estimates for total employees in the General Office
13 and all districts. The underlying forecast assumptions were accepted by DRA.

14 **(iv) Account 7952-1 Retiree Group Health Insurance.**

15 CWS administers its own (self-insured) retiree health care plan. Therefore,
16 costs for these plans are based on claims experience, not outside premium
17 payments. The plans are on the PPO model, where employees are encouraged to
18 use network providers in order to minimize costs. Further, retirees pay a monthly
19 premium of \$300 per person (a retiree and spouse pay \$600 per month). This rate
20 decreases to \$144 per person when there is other coverage such as Medicare.

21 The retiree plan is funded in advance in accordance with SFAS 106, which
22 requires that annual funding of the plan be based on an actuarial analysis of the
23 expected future expense arising during the employee service time. CWS' estimate
24 is based on an actuarial forecast from Milliman. The Milliman forecast assumes

¹⁸ Dental and Vision care inflation is forecasted at 5% each for 2011 through 2013.

1 that overall medical cost inflation will continue to be 10% annually for the
2 forecast period. The Milliman analysis also reflects a unit cost per employee
3 which DRA and CWS applied to the estimated number of employees. DRA and
4 CWS' estimate differs because of different escalation factors and estimates for
5 total employees in the General Office and all districts. The underlying forecast
6 assumptions, except for the escalation factors, were accepted by DRA.

7 **(c) Transportation Expense**

8 DRA addresses Transportation Expense in Chapter 3 Operations and
9 Maintenance Expenses of this Report. DRA's estimate for transportation expenses
10 is \$100 for Test Year 2011; CWS' estimate for the same time period is \$200
11 dollars or 100% more than DRA. DRA's estimate for 2012 is \$100; CWS'
12 estimate for the same period is \$200 or 100% more than DRA.

13 **(d) Rent**

14 CWS' estimates rental expenses of \$1,100 for Test Year 2011 and \$1,100
15 for 2012.¹⁹ DRA has verified the information regarding the Company's rental
16 expense, and recommends adopting this estimate.

17 **(e) Administration Charges Transfer**

18 Administration Charges Transfer represents credits for unregulated activity.
19 There are no administration charges transfer expenses in this rate area.

20 **(f) Workers Compensation**

21 CWS' estimates of \$2,500 in Test Year 2011 and \$2,700 in 2012 for
22 Workers Compensation are based on actuarial expectations conducted by actuaries

¹⁹ Refer to Report on the Results of Operation and Prepared Testimony for the Redwood Valley/Coast Springs District, Chapter 6.

1 at Milliman USA (“Milliman”). An assumption embedded in the estimate is a
2 provision to account for Workers’ Compensation to include expected future
3 payments from current employment.²⁰ In other words, instead of basing the costs
4 on the well-established “pay-as-you-go methodology” that the Commission has
5 consistently utilized, CWS proposes changing to an accrual basis and including the
6 amortization of past liabilities for which payments have not yet been made.

7 In the prior rate case, CWS requested for the same methodology change.
8 DRA disagreed and calculated a percentage reduction at the General Office level
9 based on the 2002-2006 average for the prior Test Year 2008-2009. The
10 Commission similarly applied DRA’s recommended reduction to all the districts
11 in that case. In Decision 08-07-008 (pages 25-26, Section 4.7 on Workers’
12 Compensation), the Commission upheld the use of the “pay-as-you-go
13 methodology” for accounting for Workers’ Compensation insurance costs.

14 For the current rate case, DRA continues to disagree with CWS’ proposed
15 change in recovery methodology and recommends continuing the “pay-as-you-go
16 methodology” for recovering this cost. To put in perspective CWS’ current
17 proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus
18 General Office, CWS’ total proposed Workers’ Compensation is \$2,747,250. This
19 amount is almost triple the total 2008 recorded amount of \$992,800 and about
20 70% higher than the 2004-2008 five-year average (in 2009 dollars) of \$1,643,900.

21 DRA reviewed the recorded amounts for Workers’ Compensation for this
22 District. DRA finds the recorded amounts for 2004 to 2008 are more reflective of
23 the “pay-as-you-go methodology” for accounting for Workers Compensation that
24 the Commission approved in D. 08-07-008. DRA then took a five-year average of
25 these recorded amounts and escalated the five-year average using DRA’s labor

²⁰ Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

1 escalation factors to derive its Test Year 2011 and 2012 forecast of \$1,000 and
2 \$1,000 respectively for the Redwood Valley District, Coast Springs Rate Area.

3 DRA recommends adapting its estimate for Workers Compensation for the
4 Test Year's for this District.

5 **(g) Nonspecific Expenses**

6 Nonspecific Expenses generally represent miscellaneous administrative and
7 general expenditures. The Nonspecific Expenses account contains various sub-
8 accounts. However, CWS does not provide estimated amounts for each sub-
9 account for future years. Instead, it provides a compound figure for Nonspecific
10 Expenses that are based on historical spending levels in all sub-accounts. CWS'
11 Nonspecific Expenses estimates for Test Year 2011 and 2012 of \$5,700 and
12 \$5,800 respectively are based on a five-year average. DRA reviewed all sub
13 accounts within Nonspecific expenses and made no adjustments. DRA then
14 escalated its five-year average using DRA's composite escalation factors to derive
15 its 2011 forecast. DRA's estimates of \$5,700 and \$5,800 for Nonspecific
16 Expenses for Test Year 2011 and 2012 respectively are the same as CWS'.

17 **(h) Amortization of Limited Term Investment**

18 This expense pertains to the amortization of intangible assets, such as
19 capital planning studies. CWS' estimates \$14,600 for Amortization of Limited
20 Term Investment. CWS bases its estimate from the general method for this
21 expense shown on CWS' amortization schedule. DRA reviewed this account and
22 recommends adopting CWS' Amortization of Limited Term Investment estimate.

1 (i) **Dues and Donations Adjustment**

2 The Dues and Donations Adjustment represents CWS' adjustment of non-
3 professional dues paid historically, for ratemaking purposes. There are no dues
4 and donations for this rate area.

5 **2) LUCERNE RATE AREA**

6 (a) **Payroll**

7 For A&G payroll expense, please refer to DRA's Payroll Report.

8 (b) **Employee Benefits**

9 For A&G employee benefits expense see above under the Coast Springs
10 rate area discussion section.

11 (c) **Transportation Expense**

12 DRA addresses Transportation Expense in Chapter 3, Operations and
13 Maintenance Expenses, of this Report. DRA's estimate for transportation
14 expenses is \$ 600 for Test Year 2011; CWS' estimate for the same time period is
15 \$700 dollars or 16.7% more than DRA. DRA's estimate for 2012 is \$600; CWS'
16 estimate for the same period is \$700 or 16.7% more than DRA.

17 (d) **Rent**

18 CWS' estimates rental expenses of \$1,500 for Test Year 2011 and \$1,500
19 for 2012.²¹ DRA has verified the information regarding the Company's rental
20 expense, and recommends adopting this estimate.

²¹ Refer to Report on the Results of Operation and Prepared Testimony for the Redwood Valley/Lucerne District, Chapter 6.

1 **(e) Workers Compensation**

2 CWS' estimate of \$12,600 in Test Year 2011 and \$13,900 in 2012 for
3 Workers Compensation is based on actuarial expectations conducted by actuaries
4 at Milliman USA ("Milliman"). An assumption embedded in the estimate is a
5 provision to account for Workers' Compensation to include expected future
6 payments from current employment.²² In other words, instead of basing the costs
7 on the well-established "pay-as-you-go methodology" that the Commission has
8 consistently utilized, CWS proposes changing to an accrual basis and including the
9 amortization of past liabilities for which payments have not yet been made.

10 In the prior rate case, CWS requested the same methodology change. DRA
11 disagreed and calculated a percentage reduction at the General Office level based
12 on the 2002-2006 average for the prior Test Year 2008-2009. The Commission
13 similarly applied DRA's recommended reduction to all the districts in that case.
14 In Decision 08-07-008 (pages 25-26, Section 4.7 on Workers' Compensation),
15 the Commission upheld the use of the "pay-as-you-go methodology" for
16 accounting for Workers' Compensation insurance costs.

17 For the current rate case, DRA continues to disagree with CWS' proposed
18 change in recovery methodology and recommends continuing the "pay-as-you-go
19 methodology" for recovering this cost. To put in perspective CWS' current
20 proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus
21 General Office, CWS' total proposed Workers' Compensation is \$2,747,250. This
22 amount is almost triple the total 2008 recorded amount of \$992,800 and about
23 70% higher than the 2004-2008 five-year average (in 2009 dollars) of \$1,643,900.

²² Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

1 DRA reviewed the recorded amounts for Workers' Compensation for this
2 District. DRA finds the recorded amounts for 2004 to 2008 more reflective of the
3 "pay-as-you-go methodology" for accounting for Workers Compensation that the
4 Commission approved in D. 08-07-008. DRA then took a five-year average of
5 these recorded amounts and escalated the five-year average using DRA's labor
6 escalation factors to derive its Test Year 2011 and 2012 forecast of \$13,700 and
7 \$13,700, respectively for the Redwood Valley District, Lucerne Rate Area.

8 DRA recommends adopting its estimate for Workers Compensation for the
9 Test Year 2011 for this rate area.

10 (f) **Nonspecific Expenses**

11 Nonspecific Expenses generally represent miscellaneous administrative and
12 general expenditures. The Nonspecific Expenses account contains various sub-
13 accounts. However, CWS does not provide estimated amounts for each sub-
14 account for future years. Instead, it provides a compound figure for Nonspecific
15 Expenses that are based on historical spending levels in all sub-accounts. CWS
16 Nonspecific Expenses estimates for Test Year 2011 and 2012 of \$7,400, and
17 \$7,600 respectively are based on a five-year average. DRA reviewed all sub
18 accounts within Nonspecific Expenses and adjusted some amounts for the years
19 2004 through 2008 under the following subaccounts: Account 792602 – Meal at
20 CWS by \$127, and Account 799500 – Miscellaneous General Expense by \$207.
21 DRA then escalated its five-year average using DRA's composite escalation
22 factors to derive its Test Year 2011 forecast. DRA estimates of \$7,300 and \$7,500
23 for Nonspecific Expenses for Test Year 2011 and 2012 forecasts respectively are
24 lower than CWS' Nonspecific estimates. CWS' Nonspecific forecasts of \$7,400
25 and \$7,600 exceeds DRA's estimate by \$100 and \$100, or 1.4%, and 1.3%
26 respectively for Test Year 2011 and 2012. DRA's reasons for these adjustments
27 are described below:

1 (ii) Account 792602 – Meals at CWS

2 DRA discovered expenditures in 2004 for an Employee Celebration Day.
3 DRA believes that the previously mentioned expenditures were of no benefit to
4 ratepayers, and removes them from DRA’s estimate.

5 (ii) Account 799500 - Miscellaneous General Expenses

6 DRA discovered expenditures in this account from 2004 for Floral Service,
7 Flowers, and Plant Memory for an employee. DRA believes that the previously
8 mentioned expenditures were of no benefit to ratepayers, and removes them from
9 DRA’s estimate.

10 (g) **Amortization of Limited Term Investment**

11 This expense pertains to the amortization of intangible assets, such as
12 capital planning studies. CWS estimates \$8,000 for Amortization of Limited
13 Term Investment. CWS bases its estimate from the general method for this
14 expense shown on CWS’ amortization schedule. DRA reviewed this account and
15 recommends adopting of CWS’ Amortization of Limited Term Investment
16 estimate for Test Year 2011 and 2012.

17 **3) UNIFIED RATE AREA**

18 (a) **Payroll**

19 For A&G payroll expense, please refer to DRA’s Payroll Report.

20 (b) **Employee Benefits**

21 For A&G employee benefits expense see above under the Coast Springs
22 rate area discussion section.

1 **(c) Transportation Expense**

2 DRA addresses Transportation Expense in Chapter 3, Operations and
3 Maintenance Expenses, of this Report. DRA's estimate for transportation
4 expenses is \$200 for Test Year 2011; CWS' estimate for the same time period is
5 \$300 dollars or 50.0% more than DRA's. DRA's estimate for 2012 is \$600;
6 CWS' estimate for the same period is \$700 or 16.7% more than DRA's.

7 **(d) Rent**

8 CWS' estimates rental expenses of \$10,900 for Test Year 2011 and
9 \$11,200 for 2012.²³ DRA has verified the information regarding the Company's
10 rental expense, and recommends adopting this estimate for CWS' Rent expense.

11 **(e) Administration Charges Transfer**

12 Administration Charges Transfer represents credits for unregulated activity.
13 There are no Administration Charges for this rate area.

14 **(f) Workers Compensation**

15 CWS' estimate of \$4,200 in Test Year 2011 and \$4,700 in 2012 for
16 Workers Compensation is based on actuarial expectations conducted by actuaries
17 at Milliman USA ("Milliman"). An assumption embedded in the estimate is a
18 provision to account for Workers' Compensation to include expected future
19 payments from current employment.²⁴ In other words, instead of basing the costs
20 on the well-established "pay-as-you-go methodology" that the Commission has

²³ Refer to Report on the Results of Operation and Prepared Testimony for the Redwood Valley/Unified District, Chapter 6.

²⁴ Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

1 consistently utilized, CWS proposes changing to an accrual basis and including the
2 amortization of past liabilities for which payments have not yet been made.

3 In the prior rate case, CWS requested the same methodology change. DRA
4 disagreed and calculated a percentage reduction at the General Office level based
5 on the 2002-2006 average for the prior Test Year 2008-2009. The Commission
6 similarly applied DRA's recommended reduction to all the districts in that case.
7 In Decision 08-07-008 (pages 25-26, Section 4.7 on Workers' Compensation),
8 the Commission upheld the use of the "pay-as-you-go methodology" for
9 accounting for Workers' Compensation insurance costs.

10 For the current rate case, DRA continues to disagree with CWS' proposed
11 change in recovery methodology and recommends continuing the "pay-as-you-go
12 methodology" for recovering this cost. To put in perspective CWS' current
13 proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus
14 General Office, CWS' total proposed Workers' Compensation is \$2,747,250. This
15 amount is almost triple the total 2008 recorded amount of \$992,800 and about
16 70% higher than the 2004-2008 five-year average (in 2009 dollars) of \$1,643,900.

17 DRA reviewed the recorded amounts for Workers' Compensation for this
18 District. DRA finds the recorded amounts for 2004 to 2008 are more reflective of
19 the "pay-as-you-go methodology" for accounting for Workers Compensation that
20 the Commission approved in D. 08-07-008. DRA then took a five-year average of
21 these recorded amounts and escalated the five-year average using DRA's labor
22 escalation factors to derive its Test Year 2011 and 2012 forecast of \$6,200 and
23 \$6,200, respectively for the Redwood Valley District, Unified Rate Area.

24 DRA recommends adapting its estimate for Workers Compensation for the
25 Test Year's for this rate area.

1 **(g) Nonspecific Expenses**

2 Nonspecific Expenses generally represent miscellaneous administrative and
3 general expenditures. The Nonspecific Expenses account contains various sub-
4 accounts. However, CWS does not provide estimated amounts for each sub-
5 account for future years. Instead, it provides a compound figure for Nonspecific
6 Expenses that are based on historical spending levels in all sub-accounts. CWS'
7 Nonspecific Expenses estimates for Test Year 2011 and 2012 are \$15,800 and
8 \$16,200, respectively are based on a five-year average. DRA reviewed all sub
9 accounts within Nonspecific Expenses and adjusted some amounts for the years
10 2004 through 2008 under the following subaccount: Account 799500 –
11 Miscellaneous General Expense by \$155. DRA then escalated its five-year
12 average using DRA's composite escalation factors to derive its Test Year 2011
13 forecast. DRA's estimates of \$15,700 and \$16,100 for Nonspecific Expenses for
14 Test Year 2011 and 2012 respectively are lower than CWS' Nonspecific Expenses
15 estimates. CWS' Nonspecific forecasts of \$15,800 and \$16,200 exceed DRA's
16 estimates by \$100 and \$100, or 0.6%, and 0.6% respectively, for test Year 2011
17 and 2012. DRA's reasons for these adjustments are described below:

18 **(i) Account 799500 - Miscellaneous General Expenses**

19 DRA identified expenditures in this account from 2004 for Celeb Day
20 Expenses. DRA believes that the previously mentioned expenditures were of no
21 benefit to ratepayers, and removes them from DRA's estimate.

22 **(h) Amortization of Limited Term Investment**

23 This expense pertains to the amortization of intangible assets, such as
24 capital planning studies. CWS estimates \$3,000 for Amortization of Limited
25 Term Investment. CWS bases its estimate from the general method for this
26 expense shown on CWS' amortization schedule. DRA reviewed this account and

1 recommends adopting CWS' Amortization of Limited Term Investment estimate
2 for Test Year 2011 and 2012.

3 **(i) Dues and Donations Adjustment**

4 The Dues and Donations Adjustment represents CWS' adjustment of non-
5 professional dues paid historically, for ratemaking purposes. There is no Dues and
6 Donations Adjustment for this rate area.

7 **D. CONCLUSION**

8 DRA recommends that the Commission adopt DRA's A&G Expenses for
9 the three rate areas in the Redwood Valley District.

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
At present rates				
Oper. Rev. less uncoll.	257.4	257.5		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	4.8	5.5	0.7	14.6%
Benefits	35.8	39.3	3.5	9.8%
Transportation Expenses	0.1	0.2	0.1	100.0%
Rent	1.1	1.1	0.0	0.0%
Admin Charges Trsf	0.0	0.0	0.0	0.0%
Workmen's Compensation	1.0	2.5	1.5	150.0%
Nonspecifics	5.7	5.7	0.0	0.0%
Amort of Limited Term Inv.	14.6	14.6	0.0	0.0%
Dues & Donations Adjustment	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	63.1 63.1	68.9 68.9	5.8 5.8	9.2% 9.2%
At proposed rates				
Oper. Rev. less uncoll.	655.6	655.6		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	63.1 63.1	68.9 68.9	5.8 5.8	9.2% 9.2%

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
At present rates				
Oper. Rev. less uncoll.	1,229.6	1,242.8		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	18.7	21.2	2.5	13.4%
Benefits	183.2	201.4	18.2	9.9%
Transportation Expenses	0.6	0.7	0.1	16.7%
Rent	1.5	1.5	0.0	0.0%
Admin Charges Trsf	0.0	0.0	0.0	0.0%
Worker's Compensation	13.7	12.6	-1.1	-8.0%
Nonspecifics	7.3	7.4	0.1	1.4%
Amort of Limited Term Inv.	8.0	8.0	0.0	0.0%
Dues & Donations Adjustment	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	233.0 233.0	252.8 252.8	19.8 19.8	8.5% 8.5%
At proposed rates				
Oper. Rev. less uncoll.	1,904.8	1,925.4		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	233.0 233.0	252.8 252.8	19.8 19.8	8.5% 8.5%

1

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
At present rates				
Oper. Rev. less uncoll.	483.7	495.9		
Local Franchise Rate	0.0000%	0.0000%		
Franchise tax	0.0	0.0	0.0	0.0%
Payroll	8.5	9.6	1.1	12.9%
Benefits	61.9	68.0	6.1	9.9%
Transportation Expenses	0.2	0.3	0.1	50.0%
Rent	10.9	10.9	0.0	0.0%
Admin Charges Trsf	0.0	0.0	0.0	0.0%
Worker's Compensation	6.2	4.2	-2.0	-32.3%
Nonspecifics	15.7	15.8	0.1	0.6%
Amort of Limited Term Inv.	3.0	3.0	0.0	0.0%
Dues & Donations Adjustment	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	106.4 106.4	111.8 111.8	5.4 5.4	5.1% 5.1%
At proposed rates				
Oper. Rev. less uncoll.	906.4	924.3		
Local Franchise Rate	0.0000%	0.0000%		
Fran. tax	0.0	0.0	0.0	0.0%
Total A & G Expenses (incl. local Fran.)	106.4 106.4	111.8 111.8	5.4 5.4	5.1% 5.1%

1

1 **CHAPTER 5: TAXES OTHER THAN INCOME**

2 **A. INTRODUCTION**

3 This chapter presents DRA’s analysis and recommendations on Taxes Other
4 Than Income for the Redwood Valley District of California Water Service’s
5 (CWS) Test Year 2011 General Rate Case. The category of Taxes Other Than
6 Income is comprised of ad valorem (property taxes), business license fees, local
7 franchise fees, and payroll taxes.

8 **B. SUMMARY OF RECOMMENDATIONS**

9 Differences between CWS’ and DRA’s estimates for Taxes Other Than
10 Income are primarily due to differences in revenue, plant and payroll estimates.
11 The methodologies used by CWS in estimating future taxes and fees are detailed
12 below. Anywhere DRA has made adjustments to improve the consistency or
13 accuracy of estimates has also been noted below.

14 **C. DISCUSSION**

15 **1) AD VALOREM TAXES**

16 CWS estimates future ad valorem taxes using the actual ad valorem tax
17 percentage from the last recorded year. This percentage is applied to the following
18 year’s estimated net total of utility property accounts.²⁵ The pro-forma ad
19 valorem estimate is the arithmetic average of the two years. DRA accepts this
20 methodology and notes that differences between CWS and DRA estimates are due
21 to differences in estimations of future plant.

²⁵ Net Total of Property = plant + materials & supplies + construction work in progress + present value of advances – advances & contributions – deferred income tax

1 **2) BUSINESS LICENSE and LOCAL FRANCHISE FEES**

2 The Redwood Valley District does not pays a business license fee or a
3 franchise tax.

4 **3) PAYROLL TAXES**

5 CWS estimates future payroll taxes using projected payroll amounts and the
6 effective tax rates from the last recorded year. The three components of payroll
7 taxes are Federal Insurance Contributions (FICA), Federal Unemployment
8 Insurance (FUI) and State Unemployment Insurance (SUI). All three components
9 have statutory limits governing the maximum percentage that can be collected
10 from employers (*see table, below*).

PAYROLL TAXES		2009 MAXIMUM	EXPLANATORY NOTES
FICA	Social Security Tax	6.2%	Social Security Tax is 6.2% applied to only the first \$106,800 of an employee's salary.
	Medicare Tax	1.45%	
FUI Tax		0.8%	Federal Unemployment Tax is 6.2% reduced by an offset credit of up to 5.4% for a total of 0.8% on the first \$7,000 of employee wages (\$56 per employee).
SUI Tax (CA)		6.3%	State Unemployment Taxes vary by company from 1.5% to 6.2% plus an Employment Training Tax Rate of 0.1% for a maximum tax percentage of 6.3%.

11 In general, DRA accepts the methodology utilized by CWS to estimate future
12 payroll taxes. An adjustment was made by DRA to the imputed FICA percentage
13 used by CWS for Redwood Valley District rate area Coast Springs (10.64%) to
14 coincide with the maximum tax (7.65%) that can be collected for the combined
15 Social Security and Medicare Taxes (see table above). All other differences
16 between DRA and CWS estimates result from differences in the estimates of
17 future payroll.

1 **D. CONCLUSION**

2 DRA recommends Commission adoption of DRA's estimates of Taxes Other
3 Than Income that are presented in Tables 5-1.

TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Ad Valorem taxes	3.4	10.1	6.7	197.1%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (CWS prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	3.1	4.9	1.8	58.1%
Business License (pres rates)	0.0	0.0	0.0	0.0%
Business License (CWS prop rates)	0.0	0.0	0.0	0.0%
Taxes other than income (present rates)	6.5	15.0	8.5	130.8%
Taxes other than income (CWS proposed rates)	6.5	15.0	8.5	130.8%
State Tax Depreciation	43.4	100.1	56.7	130.7%
Transp. Dep. Adj.	(0.7)	(0.9)	(0.2)	28.6%
State Tax Deduct(pres rates)	42.7	99.2	56.5	132.4%
State Tax Deduct (CWS prop rates)	42.7	99.2	56.5	132.4%
Fed. Tax Depreciation (pres rates)	45.5	104.9	59.4	130.7%
State Income Tax (pres. rates)	(6.9)	(19.8)	(13.0)	188.6%
State Income Tax (CWS prop rates)	28.3	15.4	(12.9)	-45.7%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	0.0	18.9	18.9	0.0%
DPAD (CWS prop. Rates)	(26.1)	(14.5)	11.6	-44.5%
Fed. Tax Deduct.(pres rates)	38.6	104.0	65.4	169.4%
Fed. Tax Deduct (CWS prop rates)	47.7	105.8	58.1	121.8%

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TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Ad Valorem taxes	38.7	50.9	12.2	31.5%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (CWS prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	17.1	19.3	2.2	12.9%
Business License (pres rates)	0.0	0.0	0.0	0.0%
Business License (CWS prop rates)	0.0	0.0	0.0	0.0%
Taxes other than income (present rates)	55.8	70.2	14.4	25.8%
Taxes other than income (CWS proposed rates)	55.8	70.2	14.4	25.8%
State Tax Depreciation	197.1	241.3	44.2	22.4%
Transp. Dep. Adj.	(7.7)	(9.0)	(1.3)	16.9%
State Tax Deduct(pres rates)	189.4	232.3	42.9	22.7%
State Tax Deduct (CWS prop rates)	189.4	232.3	42.9	22.7%
Fed. Tax Depreciation (pres rates)	259.4	317.6	58.2	22.4%
State Income Tax (pres. rates)	(8.6)	(30.9)	(22.3)	260.5%
State Income Tax (CWS prop rates)	51.1	28.8	(22.3)	-43.7%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	0.0	36.5	36.5	0.0%
DPAD (CWS prop. Rates)	0.0	(19.7)	(19.7)	0.0%
Fed. Tax Deduct.(pres rates)	250.8	323.2	72.3	28.8%
Fed. Tax Deduct (CWS prop rates)	310.5	326.7	16.2	5.2%

TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Ad Valorem taxes	6.2	10.6	4.4	71.0%
Local Franchise (pres rates)	0.0	0.0	0.0	0.0%
Local Franchise (CWS prop rates)	0.0	0.0	0.0	0.0%
Social Security Taxes	7.3	8.4	1.1	15.1%
Business License (pres rates)	0.0	0.0	0.0	0.0%
Business License (CWS prop rates)	0.0	0.0	0.0	0.0%
Taxes other than income (present rates)	13.5	19.0	5.5	40.7%
Taxes other than income (CWS proposed rates)	13.5	19.0	5.5	40.7%
State Tax Depreciation	69.7	131.4	61.7	88.6%
Transp. Dep. Adj.	(2.1)	(2.6)	(0.5)	23.8%
State Tax Deduct(pres rates)	67.6	128.8	61.2	90.7%
State Tax Deduct (CWS prop rates)	67.6	128.8	61.2	90.7%
Fed. Tax Depreciation (pres rates)	46.1	86.9	40.8	88.6%
State Income Tax (pres. rates)	(1.1)	(14.5)	(13.5)	1274.4%
State Income Tax (CWS prop rates)	36.3	22.9	(13.4)	-37.0%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	(1.1)	6.6	7.7	-708.5%
DPAD (CWS prop. Rates)	(34.0)	(18.0)	16.0	-47.1%
Fed. Tax Deduct.(pres rates)	43.9	79.0	35.0	79.8%
Fed. Tax Deduct (CWS prop rates)	48.3	91.8	43.4	89.8%

CHAPTER 6: INCOME TAXES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Income Taxes for the Redwood Valley District of California Water Service (CWS) Test Year 2011 General Rate Case. In developing its recommendations, DRA reviewed the reports, workpapers, and data responses of CWS in conjunction with information obtained from the California Franchise Tax Board and the Internal Revenue Service.

B. SUMMARY OF RECOMMENDATIONS

The majority of the differences between CWS and DRA estimates of Income Taxes are attributable to differences in estimated revenue, expenses, and rate base. Anywhere DRA has made adjustments to the estimating methodology used by CWS is detailed below. The areas in which DRA made adjustments to CWS calculations for Redwood Valley District pertain to the: (1) federal deduction of the California Corporate Franchise Tax, (2) California Corporate Franchise Tax total percentage, (3) calculation of the interest expense deduction, and (4) domestic production activities deduction.

C. DISCUSSION

1) DRA ADJUSTMENTS

(a) Federal Deduction of California Corporate Franchise Tax (CCFT)

D.89-11-058, issued in November of 1989, required that the prior year's CCFT be used as the deduction for calculation of test year federal income taxes. As discussed throughout the decision, companies at that time were required to pay estimated California taxes one year in advance.²⁶ D.89-11-058 corrected the

²⁶ California Revenue and Taxation Code, Part 11, Chapter 2, Article 2, Section 23151(f)(2)

1 timing difference between when companies had previously paid California taxes
2 and when they had realized such payment as a deduction for federal income taxes.

3 Since 1989, the California Tax Code has changed so that corporations are no
4 longer required to make estimated CCFT payments to the state one year in
5 advance. In fact, California tax law now requires corporations to compute an
6 estimated tax “upon the basis of the net income for that taxable year.”²⁷ As such,
7 DRA recommends using the current year’s CCFT as a deduction in the current
8 year’s calculation of federal income taxes. Differing from D.89-11-058 yet more
9 representative of current California tax practice, DRA’s methodology provides a
10 more accurate estimate of a utility’s assumed tax consequences and revenue
11 requirements. More importantly, consistent with long-standing regulatory
12 tradition and Generally Accepted Accounting Procedures (GAAP), the DRA
13 methodology more closely adheres to the fundamental “matching principle,”
14 where costs incurred in a given period should be matched against the revenue or
15 benefits received in the same period.

16 (b) California Corporate Franchise Tax Total Percentage

17 Referencing D.84-05-036 yet failing to cite the specific ordering paragraph,
18 section, or discussion, CWS added six-basis points to the CCFT percentage used to
19 estimate state taxes for test year and escalation years. Through data requests,
20 review of Commission decisions, and personal interviews, DRA attempted to find
21 some justification for CWS’ inclusion of an additional 0.06% in state tax
22 estimates. Unable to substantiate the validity of this addition, DRA removed the
23 percentage, which reduced CCFT estimates by 0.06%.

²⁷ Ibid

1 (c) Calculation of the Interest Expense Deduction

2 A formula error in CWS' workpapers for calculating the Interest Expense
3 Deduction resulted in Working Cash being subtracted from Rate Base. DRA has
4 corrected this error in the calculation of the deduction for Redwood Valley. The
5 recommended Interest Expense Deduction now equals Rate Base (including
6 working cash) multiplied by the current CWS weighted-average-cost-of-debt
7 (3.16%).²⁸

8 (d) Domestic Production Activities Deduction (DPAD)

9 Beginning in taxable year 2010, Section 199 of the IRS Code allows a
10 deduction equal to 9% of a taxpayer's qualified production activities income
11 (QPAI). The calculation of this deduction by CWS for Redwood Valley District
12 rate area's Lucerne and Unified assumes that all income is from qualified
13 production activities. This assumption results in an overestimation of the
14 allowable deduction and an underestimation of the rate area's assumed taxes.
15 DRA has corrected the DPAD calculation for Redwood Valley District rate area's
16 Lucerne and Unified to incorporate only those qualifying activities into the
17 deduction. DRA multiplies the deduction calculated by CWS by the percentage of
18 water produced²⁹ in the district (a qualifying activity).

19 **2) GENERAL INCOME TAX CALCULATIONS**

20 In calculating income taxes, both DRA and CWS subtract common expenses
21 from estimated revenue. For the calculation of state taxes, CWS has calculated tax
22 depreciation amounts to reflect the required flow-through of deferred tax benefits,

²⁸ D.09-05-019: Base Year 2009 Cost of Capital for the three large multi-district Class A Water Utilities

²⁹ "produced water" and "purchased water" are the two categories of "total water" used to calculated DPAD

1 while federal tax depreciation amounts reflect the requirements of normalization.
2 This methodology is consistent with the requirements of the Economic Recovery
3 Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982, and the Tax
4 Reform Act of 1986.

5 **D. CONCLUSION**

6 DRA recommends Commission adoption of DRA's estimates of Income Taxes
7 that have been calculated and presented in Tables 6-1 and 6-2.

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	257.4	257.5	0.1	0.0%
Deductions:				
O & M expenses	154.2	169.7	15.5	10.1%
A & G expenses	63.1	68.9	5.8	9.2%
G. O. Prorated expenses	60.2	81.2	21.0	34.9%
Exclude GO Book Depreciation	(8.0)	(9.3)	(1.3)	16.3%
Taxes not on Income	6.5	15.0	8.5	130.8%
Transportation Deprec Adj	(0.7)	(0.9)	(0.2)	28.6%
Interest	16.5	56.1	39.6	240.5%
Income before taxes	(34.4)	(123.2)	(88.8)	258.4%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(43.4)	(100.1)	-56.7	130.7%
Taxable income for CCFT	(77.8)	(223.3)	(145.5)	187.2%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.1)	(0.1)	0.0%
CCFT	(6.9)	(19.8)	(13.0)	188.6%
<u>Federal Income Tax</u>				
Tax Depreciation	45.5	104.9	59.4	130.7%
State Corp Franch Tax	(6.9)	(17.6)	(10.7)	156.1%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	(73.0)	(210.5)	(137.5)	188.5%
Domestic Prod. Activities Ded.	0.0	18.9	18.9	0.0%
Adjusted Taxable Income	(73.0)	(191.6)	(118.6)	162.6%
FIT Rate	35.00%	35.00%		
FIT	(25.5)	(67.0)	(41.5)	162.6%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Total FIT	(25.5)	(67.0)	(41.5)	162.6%
Total FIT & CCFT	(32.4)	(86.9)	(54.5)	168.1%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	655.6	656.0	0.4	0.1%
Deductions:				
O & M expenses	154.2	169.7	15.5	10.1%
A & G expenses	63.1	68.9	5.8	9.2%
G. O. Prorated expenses	60.2	81.2	21.0	34.9%
Exclude GO Book Depreciation	(8.0)	(9.3)	(1.3)	16.3%
Taxes not on Income	6.5	15.0	8.5	130.8%
Transportation Deprec Adj	(0.7)	(0.9)	(0.2)	28.6%
Interest	16.5	56.1	39.6	240.5%
Income before taxes	363.8	275.3	(88.5)	-24.3%
<u>Calif Corp Franchise Tax</u>				
State Tax Deductions	(43.4)	(100.1)	-56.7	130.7%
Taxable income for CCFT	320.4	175.2	(145.2)	-45.3%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.1)	(0.1)	0.0%
CCFT	28.3	15.4	(12.9)	-45.7%
<u>Federal Income Tax</u>				
Tax Depreciation	45.5	104.9	59.4	130.7%
State Corp Franch Tax	28.3	9.8	-18.5	-65.4%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	290.0	160.6	(129.4)	-44.6%
Domestic Prod. Activities Ded.	(26.1)	(14.5)	11.6	-44.5%
Adjusted Taxable Income	263.9	146.1	-117.8	-44.6%
FIT Rate	35.00%	35.00%		
FIT	92.4	51.1	(41.2)	-44.6%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Total FIT	92.4	51.1	(41.2)	-44.6%
Total FIT & CCFT	120.7	66.5	(54.2)	-44.9%

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	1,242.8	1,242.8	0.0	0.0%
Deductions:				
O & M expenses	555.8	625.7	69.9	12.6%
A & G expenses	233.0	252.8	19.8	8.5%
G. O. Prorated expenses	220.7	297.4	76.7	34.8%
Exclude GO Book Depreciation	(29.4)	(34.2)	(4.8)	16.3%
Taxes not on Income	55.8	70.2	14.4	25.8%
Transportation Deprec Adj	(7.7)	(9.0)	(1.3)	16.9%
Interest	114.5	146.0	31.5	27.5%
Income before taxes	100.1	(106.1)	(206.2)	-205.9%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(197.1)	(241.3)	-44.2	22.4%
Taxable income for CCFT	(97.0)	(347.4)	(250.4)	258.2%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.2)	(0.2)	0.0%
CCFT	(8.6)	(30.9)	(22.3)	260.5%
<u>Federal Income Tax</u>				
Tax Depreciation	259.4	317.6	58.2	22.4%
State Corp Franch Tax	(8.6)	(18.5)	(9.9)	115.8%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	(150.7)	(405.2)	(254.4)	168.8%
Domestic Prod. Activities Ded.	0.0	36.5	36.5	0.0%
Adjusted Taxable Income	(150.7)	(368.7)	(217.9)	144.6%
FIT Rate	35.00%	35.00%		
FIT	(52.8)	(129.1)	(76.4)	144.8%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Total FIT	(52.8)	(129.1)	(76.4)	144.8%
Total FIT & CCFT	(61.3)	(160.0)	(98.7)	161.0%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Operating revenues	1,925.2	1,925.4	0.2	0.0%
Deductions:				
O & M expenses	563.0	632.9	69.9	12.4%
A & G expenses	233.0	252.8	19.8	8.5%
G. O. Prorated expenses	220.7	297.4	76.7	34.8%
Exclude GO Book Depreciation	(29.4)	(34.2)	(4.8)	16.3%
Taxes not on Income	55.8	70.2	14.4	25.8%
Transportation Deprec Adj	(7.7)	(9.0)	(1.3)	16.9%
Interest	114.5	146.0	31.5	27.5%
Income before taxes	775.3	569.3	(206.0)	-26.6%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(197.1)	(241.3)	-44.2	22.4%
Taxable income for CCFT	578.2	328.0	(250.2)	-43.3%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.2)	(0.2)	0.0%
CCFT	51.1	28.8	(22.3)	-43.7%
<u>Federal Income Tax</u>				
Tax Depreciation	259.4	317.6	58.2	22.4%
State Corp Franch Tax	51.1	32.4	-18.7	-36.6%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	464.7	219.3	(245.5)	-52.8%
Domestic Prod. Activities Ded.	0.0	(19.7)	-19.7	0.0%
Adjusted Taxable Income	464.7	199.6	-265.2	-57.1%
FIT Rate	35.00%	35.00%		
FIT	162.7	69.8	(92.9)	-57.1%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Total FIT	162.7	69.8	(92.9)	-57.1%
1 Total FIT & CCFT	213.8	98.6	(115.2)	-53.9%

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	485.9	495.9	10.0	2.1%
Deductions:				
O & M expenses	219.9	244.4	24.5	11.2%
A & G expenses	106.4	111.8	5.4	5.1%
G. O. Prorated expenses	75.1	101.5	26.4	35.2%
Exclude GO Book Depreciation	(10.0)	(11.7)	(1.7)	17.0%
Taxes not on Income	13.5	19.0	5.5	40.7%
Transportation Deprec Adj	(2.1)	(2.6)	(0.5)	23.8%
Interest	25.4	65.4	39.9	156.8%
Income before taxes	57.7	(31.9)	(89.6)	-155.2%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(69.7)	(131.4)	-61.7	88.6%
Taxable income for CCFT	(12.0)	(163.3)	(151.3)	1265.0%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.1)	(0.1)	0.0%
CCFT	(1.1)	(14.5)	(13.5)	1274.4%
<u>Federal Income Tax</u>				
Tax Depreciation	46.1	86.9	40.8	88.6%
State Corp Franch Tax	(1.1)	(8.7)	(7.6)	722.8%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	12.7	(110.1)	(122.7)	-967.6%
Domestic Prod. Activities Ded.	(1.1)	6.6	7.7	-708.5%
Adjusted Taxable Income	11.6	(103.5)	(115.1)	-991.8%
FIT Rate	35.00%	35.00%		
FIT	4.1	(36.2)	(40.3)	-991.8%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Total FIT	4.1	(36.2)	(40.3)	-991.8%
1 Total FIT & CCFT	3.0	(50.7)	(53.7)	-1789.8%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Operating revenues	910.5	924.3	13.8	1.5%
Deductions:				
O & M expenses	221.8	249.5	27.8	12.5%
A & G expenses	106.4	111.8	5.4	5.1%
G. O. Prorated expenses	75.1	101.5	26.4	35.2%
Exclude GO Book Depreciation	(10.0)	(11.7)	(1.7)	17.0%
Taxes not on Income	13.5	19.0	5.5	40.7%
Transportation Deprec Adj	(2.1)	(2.6)	(0.5)	23.8%
Interest	25.4	65.4	39.9	156.8%
Income before taxes	480.4	391.4	(89.0)	-18.5%
<u>Calif. Corp. Franchise Tax</u>				
State Tax Deductions	(69.7)	(131.4)	-61.7	88.6%
Taxable income for CCFT	410.8	259.9	(150.8)	-36.7%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.1)	(0.1)	0.0%
CCFT	36.3	22.9	(13.4)	-37.0%
<u>Federal Income Tax</u>				
Tax Depreciation	46.1	86.9	40.8	88.6%
State Corp Franch Tax	36.3	3.6	-32.7	-90.1%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	398.0	300.9	(97.1)	-24.4%
Domestic Prod. Activities Ded.	(34.0)	(18.0)	16.0	-47.1%
Adjusted Taxable Income	364.0	282.9	-81.1	-22.3%
FIT Rate	35.00%	35.00%		
FIT	127.4	99.0	(28.4)	-22.3%
Investment Tax Credit	0.0	0.0	0.0	0.0%
Total FIT	127.4	99.0	(28.4)	-22.3%
Total FIT & CCFT	163.7	121.8	(41.9)	-25.6%

CHAPTER 7: UTILITY PLANT IN SERVICE

A. INTRODUCTION

The Redwood Valley District is composed of three sub-areas for ratemaking purposes: Lucerne, Unified, and Coast Springs. DRA's and CWS' estimates for the Lucerne, Coast Springs and Unified District Plant in Service for the Test Year 2011 and Escalation Year 2012 are shown in Tables 7-1 and 7-2 at the end of this chapter, for each respective sub-area.

DRA reviewed and analyzed CWS' testimony, application, Minimum Data Requirements, workpapers, capital project details, estimating methods, and responses to various DRA data requests. DRA also conducted a field investigation of most of the proposed specific plant additions before making its own independent estimates including adjustments where appropriate. Important and significant differences between DRA's and CWS' estimates of specific plant additions are attributed to the items as listed in Table 7-B.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that 1) plant additions for seven specific projects in 2009 be disallowed or adjusted; 2) plant additions for one specific project in 2011 be adjusted; 3) plant additions for CWS' main, service and hydrant replacement program be adjusted to reflect DRA's estimates; 4) plant additions for carryover projects be adjusted to reflect DRA's estimates; and 6) plant additions for non-specifics in 2009 through 2012 be adjusted to reflect DRA's escalation factors. Based on these recommendations, DRA's estimates for the 2009, 2010, 2011, and 2012 plant additions are \$349,300, \$240,600, \$420,400 and \$238,400, respectively versus CWS' proposed amounts of \$1,265,700, \$1,699,000, \$782,500 and \$699,900, respectively for the same years.

Table 7-A. Redwood Valley Coast Springs District
Company funded Plant Additions,
Including Carryovers
(Thousands of Dollars)

	2009	2010	2011	2012	AVG
DRA	\$4.1	\$0	\$3.3	\$0	\$1.9
CWS	\$75.2	\$318.6	\$3.3	\$252.6	\$162.4

Table 7-B. Redwood Valley Lucerne District
Company funded Plant Additions,
Including Carryovers and Non-Specifics
(Thousands of Dollars)

	2009	2010	2011	2012	AVG
DRA	\$338.2	\$170.4	\$417.1	\$238.4	\$291.0
CWS	\$989.7	\$233.0	\$682.0	\$447.3	\$588.0

Table 7-C. Redwood Valley Unified District
Company funded Plant Additions,
Including Carryovers
(Thousands of Dollars)

	2009	2010	2011	2012	AVG
DRA	\$7.0	\$70.2	\$0.0	\$0.0	\$19.3
CWS	\$200.8	\$1,147.4	\$97.2	\$0.0	\$361.3

Table 7-D. Specific Project Differences Comparison

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2009	19907	Intangible Plant	CPUC Mandated Reports - Coast Springs - Sta. 7	\$21,900	Canceled by CWS
2009	20295	Storage	Replace Clarifier Lining & Re-Coating - Sta. 1 - Lucerne	\$86,400	\$76,700
2009	20457	Equipment	Tools - Lucerne	\$5,400	Use Non-specific

					budget
2009	20560	Equipment	Office Furniture - Guerneville	\$8,100	Use Non-specific budget
2009	20561	Equipment	Office Furniture - Lucerne	\$8,700	Use Non-specific budget
2009	20868	Equipment	Computer & Monitor - Lucerne	\$2,600	Use Non-specific budget
2009	22309	Structures	Access Road - Sta. 2 - Lucerne	\$359,200	\$0
2010	20362	Mains, Services, Hydrants	Cliff Street - Oceanview - Coast Springs	\$318,600	\$0
2011	14844	Storage	Paint Interior & Exterior Complete - Sta.2 Arden Tank 1 - Lucerne	\$175,529	\$124,500
2011	20319	Mains, Services, Hydrants	Rancho Del Paradiso System - Unified	\$97,200	\$0
2012	20442	Mains, Services, Hydrants	Park Ave. - Coast Springs	\$252,600	\$0

1

2

3 C. DISCUSSION

4 In the Coast Springs district, CWS has recorded an average of \$538,300 in
5 gross plant additions during 2004-2007.³⁰ The district's average gross plant
6 addition request for the period of 2009-2012 is \$162,400. It should be emphasized
7 that the recorded plant additions have exceeded the Commission authorized gross
8 plant addition budgets during 2004-2007 by \$1,044,200 which represents a 746%
9 budgetary overrun of authorized additions for that period.³¹ In the years since the
10 last GRC (2006-2007 data), CWS has recorded \$895,300 more gross additions

³⁰ Gross plant additions include company funded plant additions as well as contributions and advance deposits for specific plant.

³¹ CWS Response to MD7-001. The authorized gross plant additions for this period averaged \$123,500.

than authorized, not including 2008 which is difficult to quantify due to interim rates.³² Because these additions have not been authorized (they are only mentioned once in a misleading sentence next to an unexplained table comparing authorized to recorded capital additions in Chapter 8 of the RO report) they escape reasonableness review while significantly increasing rates.

Table 7-E. Coast Springs Water Treatment Plant

Booked To Plant	
PID 8087	\$397,940
PID 14318	\$754,719
PID 14319	\$244,760
	\$1,397,419
Contributions	
DWR Overpayment	\$120,461
SRF Loan Amount	\$494,276
Included in ratebase	\$782,682
Advice letter cap	- \$341,800
Budgetary Overrun	\$440,882

At least \$440,900 of these budgetary overruns are due to projects 8087, 14318, and 14319 for the Coast Springs Water Treatment Plant which were authorized in the last rate case via advice letter with a cap of \$341,800.³³ CWS stated that it intends to justify cost overruns for these three projects but DRA did not receive any information regarding the reasonableness or the unavoidable nature of the overruns. According to documents provided to CDPH in December 2003 regarding the SRF loan, the original budgetary estimate for the Coast Springs

³² The calculated overrun accounts for the \$614,800 in total funding provided by the SRF loan from CDPH and the DWR overpayment as shown in Table 5.

³³ According to email correspondence between CWS staff Long Nguyen and DRA utilities engineer Isaiah Larsen, CWS states, "Advice Letter 1945 was filed on 5/29/2009 to seek recovery for Projects 8087, 14318 and 14319 up to the capped amount of \$341,800."

1 water treatment plant was \$551,600.³⁴ The final cost booked to plant by CWS
2 without any further justification was \$1.4 million, a 154% budgetary overrun.

3 DRA recommends disallowing all cost overruns for the Coast Springs water
4 treatment plant. The excessive level of capital additions since the last GRC have
5 not been justified or explained in any shape or form by CWS in this GRC, and the
6 \$895,300 in known excess plant additions for Coast Springs should be removed
7 from the 2009 beginning of year balance until CWS can provide reasonable
8 justifications for the unprecedented level of budget overruns. On a going-forward
9 basis, DRA recommends an average of \$1,900 in gross plant additions during
10 2009-2012 for the Coast Springs District.

11 In the Lucerne district, CWS has recorded an average of \$466,500 in gross
12 plant additions during 2004-2007. The district's average gross plant addition
13 request for the period of 2009-2012 is \$611,300. It should be emphasized that the
14 recorded plant additions have exceeded the Commission authorized gross plant
15 addition budgets during 2004-2007 by \$617,400 which represents a 49%
16 budgetary overrun of authorized additions for that period.³⁵

17

Table 7-F. Lucerne Water Treatment Plant & New Storage

Booked To Plant		
PID 8091	\$1,602,200	AL Cap of \$350,000
PID 12508	\$672,100	
PID 14069	\$6,266,100	
	<u>\$8,540,400</u>	
SRF + DWR Loans	<u>\$8,084,800</u>	

³⁴ CWS response to DRA data request MD7-015, Question 2. The \$494,300 SRF loan has a 2.6% interest rate.

³⁵ CWS Response to MD7-001. The authorized gross plant additions for this period averaged \$312,200.

Included in ratebase	\$455,600
Subtract \$350,000 AL	\$105,600
Including PID 18382	\$383,900

DRA recommended disallowance

1

2 \$383,900 of the budgetary overruns is due to projects 8091 and 14069 for
3 the Lucerne Water Treatment Plant and projects 18382 and 12508 for a new
4 300,000 gallon storage tank. Project 12508 was authorized in the last rate case via
5 advice letter with a cap of \$350,000, while project 18382 was not mentioned in the
6 2005 GRC DRA report, decision or settlement.³⁶ DRA did not receive any
7 information regarding the reasonableness or the unavoidable nature of the
8 overruns for these projects. According to Safe Drinking Water State Revolving
9 Fund (SDWSRF) loan documents provided by CDPH in May 2009, the budgetary
10 estimate for the Lucerne water treatment plant was updated to be \$7,078,700.³⁷
11 The final cost booked to plant by CWS without any further justification was
12 \$7,868,300, an 11% budgetary overrun.

13 CWS lists project 12508 as related to the water treatment plant construction
14 in response to a DRA data request, but in reality this project which added 300,000
15 gallons of storage at Station 2 is unrelated to the treatment plant. Because CWS
16 also had \$1,006,100 in loan funding from DWR, most of which was not needed
17 for the treatment plant, CWS apparently decided to use this contribution to fund
18 budgetary overruns in the water storage tank projects (12508 and 18382). DRA is
19 not opposed to using all available low interest loan funds to reduce plant additions
20 to ratebase, but is opposed to excessive undocumented budgetary overruns (project
21 12508 had a 192% overrun) and project 18382 which was not justified at all.

³⁶ Project 18382 was booked in 2008 at a total cost of \$289,300 according to CWS response to DRA data request MD7-001.

³⁷ CWS response to DRA data request MD7-015, Question 2. The \$7.1 million SRF loan has a zero percent interest rate.

1 DRA recommends removing \$383,900 in capital costs from the beginning of year
2 balance for utility plant in service in 2009. On a going-forward basis, DRA
3 recommends an average of \$291,000 in gross plant additions during 2009-2012 for
4 the Lucerne District.

5 In the Unified district, CWS has recorded an average of \$611,600 in gross
6 plant additions during 2004-2007. The district's average gross plant addition
7 request for the period of 2009-2012 is \$364,500. It should be emphasized that the
8 recorded plant additions have exceeded the Commission authorized gross plant
9 addition budgets during 2004-2007 by \$155,400 which represents a 34%
10 budgetary overrun of authorized additions for that period.³⁸ On a going-forward
11 basis, DRA recommends of an average of \$19,300 in gross plant additions during
12 2009-2012 for the Unified District.

13 DRA issued multiple data requests investigating the significant mismatch
14 between authorized and recorded capital additions for the last five years for all
15 districts.³⁹ In its responses, CWS did not offer any meaningful explanation of the
16 differences other than the fact that contributions and advances are estimated in the
17 authorized additions column, while they derive from actual figures in recorded
18 additions. DRA considers this level of recorded plant additions excessive, not
19 compliant with previous Commission orders, and therefore recommends a
20 systematic audit of actual capital additions and authorized budgets in the
21 subsequent GRC, as was ordered in D.03-09-021 for all future CWS general rate
22 cases.⁴⁰ On page 54 of that Decision, it states:

³⁸ CWS Response to MD7-001. The authorized gross plant additions for this period averaged \$456,200.

³⁹ DRA data requests MD7-001 and NKS-007.

⁴⁰ According to CWS Response to DRA data request NKS-007, CWS does not believe it needs to comply with Order 3 of D.03-09-021 which states, "In all future general rate case applications, Cal Water shall present an initial showing with the major changes that led to the requested change
(continued on next page)

1 “We will, therefore, require that Cal Water submit a report in
2 each of its future district general rate case filings showing budgeted
3 capital projects and actual expenditures. We expect these reports to
4 compare the budgeted capital projects to actual expenditures, and to
5 explain each deviation and deferral, with revised in-service dates for
6 the deferrals. We will use this historic analysis to guide our
7 evaluation of any proposed capital projects.”

8 **1) Carryover Projects**

9 CWS identifies \$1,363,916 in carryover projects for the Unified District,
10 \$175,700 in carryover projects for the Lucerne District, and \$89,200 in carryover
11 projects for its Coast Springs District in its ratebase workpapers (totaling \$1.63
12 million). In the Results of Operation report, CWS identifies \$1,072,700 in
13 carryover projects for the Unified District, with no carryovers listed for the other
14 two districts. DRA was not able to reconcile the two estimates, even after a
15 clarifying data request was sent.

16 Based upon the CWS response to DRA data request MD7-008 for all
17 carryover projects, DRA calculated its carryover estimate by subtracting advice
18 letter projects from the carryover totals, since advice letter projects have uncertain
19 costs and completion dates, and may not occur at all.⁴¹ Based upon its analysis,
20 DRA recommends \$20,800 in carryover projects for the Lucerne District, \$77,200
21 in carryover projects for the Unified district and \$4,100 in carryover projects for
22 the Coast Springs District.

(continued from previous page)

identified and quantified. Each issue should include detailed explanations and justifications for the requested change, with cross-references to evidentiary support. All tables of data should be explained and analyzed. All necessary evidence should be included in the record.”

⁴¹ Advice letter projects are handled separately though a rate base offset.

CWS lists carryover project 12497 for manganese and iron removal in the Hawkins system within the Unified District with a budget of \$130,100 in its RO report. This project was approved in the last GRC settlement with a capital budget of \$70,000. DRA recommends approving the original capital budget only and has included these costs in its carryover budget estimate. CWS also lists carryover project 17546 for treatment of iron, manganese and arsenic in the Hawkins system at a total cost of \$942,600 in 2010. This project was not discussed in the last GRC DRA Report, nor was it mentioned in the last Decision or Settlement. CWS provided no justification for its capital budget estimate, and it is not apparent that this project was approved in the last GRC decision. DRA recommends that project 17546 be disallowed due to insufficient justification and possible duplication of project 12497.

The advice letter deadline for carryover projects is the effective date for new rates in the current GRC, which is January 1, 2011.⁴² DRA recommends that any advice letter projects it has not recommended disallowing should keep their existing deadlines and caps.

2) Main, Service & Hydrant Replacement Program

CWS' requests a total of \$1.4 million from the years 2009-2012 in Company funded specific Mains, Service and Hydrant Replacement Projects as shown in Table 7 below:

Table 7-G. Requested Mains, Services and Hydrants Replacement Costs

	2009	2010	2011	2012	Totals
Mains	\$172,300	\$210,000	\$257,800	\$317,900	\$958,000
Services	\$55,100	\$92,400	\$70,481	\$131,641	\$349,622
Hydrants	\$16,200	\$16,200	\$16,500	\$32,700	\$81,600

⁴² D.06-08-011. OP 7, p.68.

Non-Specific Mains, Services, Streets and Hydrants	\$91,200	\$93,100	\$95,200	\$97,300	\$376,800
Total Specific	\$243,600	\$318,600	\$344,769	\$482,276	\$1,389,244
Total including non-specific	\$334,800	\$411,700	\$439,969	\$579,576	\$1,766,044

1 The \$1.4 million in specific projects is in addition to the requested \$0.4
2 million in non-specific mains, service, street and hydrant replacement projects, for
3 a total of \$1.8 million in mains, hydrants and service replacement projects. CWS
4 declined to provide historical costs for mains, services, hydrants and meters to
5 DRA, despite multiple data requests.⁴³ All three Redwood Valley districts have
6 high levels of unaccounted for water (UAF);⁴⁴ repairing and tracking leak history
7 is essential to develop a prioritized main replacement program to effectively
8 reduce water losses. Unfortunately, in the Unified and Coast Springs Districts,
9 CWS was unable to produce any leak history record documentation for its main
10 replacement projects; even though it claimed that the sections of main had a
11 history of leaks. CWS' claimed justification for these projects usually asserts
12 either numerous leaks or fireflow improvements as a justification for replacement
13 of these mains, services and hydrants.

14 (a) **Fireflow:** In terms of fire flow, according to GO 103-A, "The
15 utility shall not be responsible for modifying or replacing at its expense any
16 existing facilities, which are otherwise adequate, in order to provide increased fire
17 flow or duration due to changes in the standards after the initial construction."⁴⁵
18 CWS' replacement of pipe merely to improve fireflow cannot therefore be

⁴³ See non-responsive CWS answers to DRA data requests MD7-016, MD7-017 and NKS-005. CWS states in the responses that, "This level of detail is not readily available as Cal Water District does not track its annual cost of facilities in this manner."

⁴⁴ Based on the 2003-2008 average, CWS forecasts 28.3% UAF in the Lucerne's workpapers, 23.9% in the Coast Springs' workpapers, and between 26.8% and 28.4% in the Unified

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1 justified. This includes justifications for project 20442 with a 2012 capital budget
2 of \$252,600 in Coast Springs, and project 21005 with a 2011 capital budget of
3 \$97,200 in Rancho del Paradiso (Unified).

4 (b) **Leaks/100 miles of main:** Further, CWS provided the following
5 response to ALJ O'Donnell's request for an exhibit showing CWS' methodology
6 for mains replacement, "CWS annually determines the number of leak for each
7 district on the basis of leaks per one hundred miles of main. This information
8 along with the actual length of targeted mains in a district is used to set the annual
9 target main replacement length." However, when DRA asked for the leaks per
10 one hundred miles of main for projects in this GRC, CWS was unable to provide
11 such information.⁴⁶

12 (c) **Repair vs replacement:** When DRA asked CWS how it
13 concluded a particular targeted main was beyond its "useful life", CWS
14 responded: "In reality, one can extend the "useful life" of many facilities, but the
15 cost to do so may outweigh the cost to replace."⁴⁷ However when DRA asked
16 CWS if it did any analysis to show that the cost to repair was higher than the cost
17 to replace for the targeted mains in this general rate case, CWS said it had not
18 done such an analysis.⁴⁸

(continued from previous page)
workpapers.

⁴⁵ GO 103-A, VI. Fire Protection Standards, 3.Replacement of Mains A.Changes to Fire Code, p.25.

⁴⁶ CWS' response to DRA data request NKS-006, question 7, attached in Appendix B to the Chico District Report.

⁴⁷ CWS' response to DRA data request NKS-002, question 11, attached in Appendix B to the Chico District Report.

⁴⁸ CWS' response to DRA data request NKS-002, question 8, attached in Appendix B to the Chico District Report.

1 DRA therefore concludes that CWS' is not able to effectively
2 prioritize its specific hydrant, main and service replacement projects based on
3 actual conditions of the pipe and using tools such as AWWA's "Decision Support
4 System for Distribution System Piping Renewal", which have been available since
5 2002.⁴⁹ DRA notes that other utilities, such as California American Water
6 Company, routinely prepare a "Condition Based Assessment" document prepared
7 by a licensed professional engineer to assess the condition of their transmission
8 and distribution systems, in each district to identify and prioritize investment in
9 transmission and distribution infrastructure.⁵⁰

10 In the Lucerne district, CWS did provide leak history information for three
11 main replacement projects (projects 20314, 20319, and 20320). However, CWS'
12 unit cost estimates for these projects are significantly higher than the \$108 per
13 linear foot budgeted in 2006-2008 by CWS for the Redwood Valley district main
14 replacement program.⁵¹

15 DRA therefore recommends that the Commission:

- 16 1) Disallow the specific main replacement projects budget i.e. a total of
17 \$958,000.

⁴⁹ In its response to DRA data request NKS-002, question 12, CWS replied it had not used this or a similar tool to evaluate its mains targeted for replacement in this general rate case. The response is attached in Appendix B.

⁵⁰ For example, in A.08-01-027, Cal Am conducted a condition-based assessment of its infrastructure for its Monterey district, and prioritized its proposals in that rate case based on the condition of the infrastructure.

⁵¹ CWS General Report on the Results of Operation and Prepared Testimony, July 1, 2009, Appendix 7. The internal CWS budgets and unit costs do not correspond to actual main replacement costs.

- 1 2) Allow the adjusted⁵² non-specific budget in the amount of \$343,300 for
2 mains, service, street and hydrant projects to allow CWS to complete
3 the three Lucerne main replacement projects (20314, 20319, and 20320)
4 with high break rates.
- 5 3) Allow \$151,800 and \$46,200 in service and hydrant replacement
6 projects costs, respectively, related to the three Lucerne main
7 replacement projects.
- 8 4) Direct CWS to develop a “condition-based assessment” prepared by a
9 licensed professional engineer including a prioritization plan, a
10 comparison of the cost to repair versus replacement, and an analysis of
11 leaks/100 miles to justify its main replacement programs in future rate
12 cases.

13 **3) Project 22309 – Access Road at Station 2**

14 CWS budgets \$359,200 in 2009 capital additions in order to secure a
15 permanent easement and build an access road to Station 2 in the Lucerne system.
16 CWS stated that the construction of the 1,044 foot paved access road was
17 necessary to replace “an unpaved pathway situated along a similar alignment,
18 which caused difficulties in accessing the tank site due to uneven natural terrains
19 and soft and muddy soil conditions.”⁵³ The road construction was a joint
20 endeavor agreed to by CWS and the local property owner, which CWS originally
21 stated was a prerequisite for building the new 300,000 gallon storage tank installed
22 in 2008.⁵⁴ However, this project was not proposed to the Commission or DRA in

⁵² Non-specific capital budgets have been adjusted for DRA’s inflation forecast as discussed at the end of the chapter.

⁵³ CWS response to DRA data request MD7-015, Question 1.

⁵⁴ Project justification for PID 22309, in Final Application, A.09-07-001.

1 the last GRC when the tank construction was approved via an advice letter filing
2 creating an incomplete picture of the actual costs for the new storage tank. In
3 response to a subsequent data request, CWS did not state that the access road was
4 required to construct the new tank, but that “it would benefit both parties” and a
5 cost-sharing agreement was decided upon in exchange for a permanent
6 easement.⁵⁵ CWS did not state why the existing arrangement of using with the
7 unpaved pathway was unsatisfactory other than the “soft and muddy soil
8 conditions.”

9 DRA examined the settlement agreement between CWS and the landowner
10 and determined that CWS should be responsible for no more than \$210,100 based
11 upon the final bid from the contractor hired for the road paving.⁵⁶ However, DRA
12 does not agree that these costs were reasonably incurred. The access road was not
13 completed until June 2009 according to the invoice from the contractor, which was
14 after the new storage tank was constructed. As well, there did not appear to be any
15 compelling reason for building such an expensive road merely to access a tank site
16 more easily. CWS did not demonstrate that the soft and muddy conditions were
17 preventing district staff from reaching the tank site or that vehicles were becoming
18 stuck in the road. DRA therefore recommends that this project be disallowed and
19 removed from capital additions for 2009.

20 **4) Project 14844 – Paint Exterior and Interior of Tank 1 at Station 2**

21 CWS budgets \$175,500 in 2011 capital additions to repaint its 200,000
22 gallon tank at Station 2 in Lucerne. DRA observed the tank during its site visit

⁵⁵ In fact, there was already a 200,000 gallon tank at Station 2 prior to the 2008 construction of the new 300,000 gallon tank. It was clearly possible to construct the previous storage tank without paving an access road.

⁵⁶ CWS agreed to pay 75% of items 1-9 in the bid, plus \$5,000, plus \$7,500 for surveying work. DRA also included \$4,700 for permits and fees as well as 8% overhead. CWS response to DRA data request MD7-015, Question 1.

1 and agrees with need for this project. DRA does not agree with the cost estimate
2 for the interior painting however. CWS used a Bear Gulch tank painting project
3 with a total interior area of 3,868 sq. ft. However, tank 1 will require 6,029 sq. ft
4 of interior painting. Thus, a better reference would be Los Altos Blandor tank 2
5 with a total interior area of 5,847 sq. ft. which was completed in 2008 at a total
6 cost of \$83,079. Based upon the \$14.21 per sq. ft. unit cost reference, DRA
7 estimates a cost of \$85,665 for the interior painting. DRA escalated this total for 3
8 years of inflation and added CWS' exterior estimate to arrive at a total cost of
9 \$129,600. DRA recommends approving this project at a adjusted cost of \$129,600
10 in 2011 capital additions.

11 **5) Projects 20457, 20560, 20561 & 20868 – Tools, Furniture and**
12 **Computer Equipment**

13 CWS budgets a total of \$24,800 for four projects to add new tools,
14 furniture, and computer hardware in the Lucerne and Guerneville offices. DRA
15 understands the need for such projects but believes that they can best be handled
16 through the non-specific budgets that CWS regularly uses for small purchases.
17 DRA does not seek to micro-manage utilities expenditures and cannot examine the
18 reasonableness of every purchase decision. Therefore, DRA recommends using
19 CWS' estimated non-specific budget as recommended by DRA in the section
20 below for these minor expenditures.

21 **6) Project 20295 – Replace Clarifier Lining**

22 CWS budgeted \$86,400 in 2009 capital additions to replace the lining and
23 re-paint the clarifier at its Lucerne water treatment plant. DRA inspected the
24 condition of the clarifier during its site visit and agrees with the need to re-coat
25 and paint the clarifier. Based upon the recent bid received by CWS for this project
26 for a total cost of \$71,000, DRA estimates that this project should cost \$76,700
27 including the 8% overhead factor. Therefore, DRA recommends that this capital
28 addition be approved at an adjusted cost of \$76,700 in 2009.

1 **7) Projects 19907 & 18792 – CPUC Mandated Reports and WS&FMP**

2 CWS budgeted \$21,900 for 2009 capital additions associated with project
3 19907 and \$86,400 as a carryover budget for project 18792 for a WS&FMP.

4 CWS stated in a response to a data request that project 19907 had been canceled.⁵⁷

5 In the last GRC, CWS and DRA agreed to defer project 7160 for a WS&FMP to
6 the next rate case. However, CWS presented no information on project 18792 in
7 this rate case, treating it as if it was already approved. DRA does not agree with
8 this assertion and without any justification or explanation of the budget for this
9 report cannot evaluate its reasonableness. DRA notes that the WS&FMP appeared
10 to be prepared by internal staff but the current budget has increased beyond the
11 \$81,000 cost estimate in the 2005 GRC for preparation by a professional
12 consultant. Therefore, DRA recommends disallowing capital additions associated
13 with these projects.

14 **8) Meter Replacement, 2009 to 2012**

15 CWS proposes no specific budget during 2009-2012 to replace small
16 customer meters. Based upon its analysis of the unaccounted for water problems
17 in all three districts, DRA recommends that the Commission direct CWS to
18 perform an audit of its in-service meters and present a database of all customer and
19 production meters currently in service in all Redwood Valley districts.⁵⁸ CWS
20 should include the following information on each meter: age, size, type, rated
21 accuracy, and last date of maintenance or testing. In this manner, the Commission
22 can determine if CWS is complying with GO 103-A schedules for meter
23 replacement or retesting.

⁵⁷ CWS response to DRA data request MD7-015, Question 5.

⁵⁸ CWS currently has 1,944 customers in total for all Redwood Valley districts.

1 **9) Non-specific Capital Budgets, 2009 to 2012**

2 CWS proposed \$203,900, \$208,100, \$213,000, and \$217,600, respectively
3 in plant additions for non-specifics in the four years from 2009 to 2012. CWS non-
4 specific estimates are based on a 10-year average with a 2% yearly escalation
5 factor. DRA agrees with using the 10-year average, but has used escalation
6 factors for 2009 through 2012 from the May 2009 Energy Cost of Service Branch
7 escalation factors memo. These factors are: 2009 = (5.5)%; 2010 = (0.1)%; 2011
8 = 2.0%; 2012 = 2.7%. Using these escalation factors the non-specific estimates
9 are \$170,600, \$170,400, \$173,800, and \$178,400 for 2009, 2010, 2011, and 2012
10 respectively.

11 **D. CONCLUSION**

12 DRA's recommendations have been incorporated in the calculations for
13 DRA's recommended Plant in Service as shown in Table 7-1 and Table 7-2.

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
PLANT IN SERVICE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Plant in Service - BOY	1,605.2	2,899.6	1,294.4	80.6%
Additions				
Gross Additions	3.3	3.3	0.0	0.0%
Capitalized Interest	0.0	0.0	0.0	0.0%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>(4.4)</u>	<u>(4.4)</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	(1.1)	(1.1)	0.0	0.0%
Adjustments				
Gen. Plant allocated to contracts	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	0.0	0.0	0.0	0.0%
SRF Funded Treatment Plant	(494.3)	(494.3)	0.0	0.0%
Overpayment of DWR Loan	(120.5)	(120.5)	0.0	0.0%
Plant in Service - EOY	1,604.1	2,898.6	1,294.5	80.7%
Weighting Factor	14.8%	14.8%		
Wtd. Avg. Plant in Service	990.2	2,284.6	1,294.4	130.7%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
PLANT IN SERVICE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	1,604.1	2,898.6	1,294.5	80.7%
Additions				
Gross Additions	0.0	252.6	252.6	0.0%
Capitalized Interest	0.0	6.2	6.2	0.0%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>(4.4)</u>	<u>(4.4)</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	(4.4)	254.4	258.8	-5881.8%
Adjustments				
Gen. Plant allocated to contractors	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	0.0	0.0	0.0	0.0%
SRF Funded Treatment Plant	(494.3)	(494.3)	0.0	0.0%
Overpayment of DWR Loan	(120.5)	(120.5)	0.0	0.0%
Plant in Service - EOY	1,599.7	3,153.0	1,553.3	97.1%
Weighting Factor	14.8%	14.8%		
Wtd. Avg. Plant in Service	988.6	2,321.4	1,332.8	134.8%

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
PLANT IN SERVICE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	13,165.8	14,280.2	1,114.4	8.5%
Additions				
Gross Additions	440.4	705.3	264.9	60.1%
Capitalized Interest	10.0	16.5	6.5	65.0%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	0.0	0.0	0.0	0.0%
Net Additions	450.4	721.8	271.4	60.3%
Adjustments				
Gen. Plant allocated to contracts	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	0.0	0.0	0.0	0.0%
SRF Funded Treatment Plant	(7,078.7)	(7,078.7)	0.0	0.0%
DWR Funded Plant	(1,006.1)	(1,006.1)	0.0	0.0%
Plant in Service - EOY	13,616.2	15,002.0	1,385.8	10.2%
Weighting Factor	14.8%	14.8%		
Wtd. Avg. Plant in Service	5,147.6	6,302.1	1154.5	22.4%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
PLANT IN SERVICE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	13,616.2	15,001.9	1,385.7	10.2%
Additions				
Gross Additions	261.7	470.6	208.9	79.8%
Capitalized Interest	6.2	11.3	5.1	82.3%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	267.9	481.9	214.0	79.9%
Adjustments				
Gen. Plant allocated to contractors	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	0.0	0.0	0.0	0.0%
SRF funded Treatment Plant	(7,078.7)	(7,078.7)	0.0	0.0%
DWR funded Plant	(1,006.1)	(1,006.1)	0.0	0.0%
Plant in Service - EOY	13,884.1	15,483.8	1,599.7	11.5%
Weighting Factor	14.8%	14.8%		
Wtd. Avg. Plant in Service	5,571.0	6,988.3	1,417.3	25.4%

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
PLANT IN SERVICE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	1,744.5	3,046.2	1,301.7	74.6%
Additions				
Gross Additions	3.2	100.3	97.1	3034.4%
Capitalized Interest	0.1	2.5	2.4	2400.0%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	3.3	102.8	99.5	3015.2%
Adjustments				
Gen. Plant allocated to contracts	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	0.0	0.0	0.0	0.0%
DWR funded Plant	(260.0)	(260.0)	0.0	0.0%
Plant in Service - EOY	1,747.8	3,149.0	1,401.2	80.2%
Weighting Factor	14.8%	14.8%		
Wtd. Avg. Plant in Service	1,485.0	2,801.4	1316.4	88.6%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
PLANT IN SERVICE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Plant in Service - BOY	1,747.8	3,149.0	1,401.2	80.2%
Additions				
Gross Additions	3.2	3.2	0.0	0.0%
Capitalized Interest	0.1	0.1	0.0	0.0%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0%</u>
Net Additions	3.3	3.3	0.0	0.0%
Adjustments				
Gen. Plant allocated to contractors	0.0	0.0	0.0	0.0%
Historic Capitalized Interest	0.0	0.0	0.0	0.0%
DWR Funded Plant	(260.0)	(260.0)		
Plant in Service - EOY	1,751.1	3,152.3	1,401.2	80.0%
Weighting Factor	14.8%	14.8%		
Wtd. Avg. Plant in Service	1,488.3	2,889.5	1,401.2	94.1%

1 **CHAPTER 8: DEPRECIATION RESERVE AND**
2 **DEPRECIATION EXPENSE**

3 **A. INTRODUCTION**

4 This chapter presents DRA’s analyses and recommendation on
5 Depreciation for CWS’ Redwood Valley District. Tables 8-1 and 8-2 show
6 weighted average accumulated depreciation and amortization for Test Year 2011
7 and Escalation Year 2012.

8 **B. SUMMARY OF RECOMMENDATIONS**

9 Differences in DRA’s and CWS’ estimates are the result of different plant
10 additions for the test year and the escalation year. These differences are discussed
11 in Chapter 7, Plant in Service.

12 **C. DISCUSSION**

13 **1) Coast Springs**

14 CWS depreciation rates for components listed in the CPUC Uniform
15 System of Accounts for Water Utilities are based on a “Depreciation Study
16 as of December 31, 2006” prepared by AUS Consultants dated June 21,
17 2007. If the depreciation rates proposed in the study are used, instead of
18 the depreciation rates adopted in D.06-08-011, the overall composite
19 depreciation rate for the Redwood Valley Coast Springs District increases
20 by 0.90% (from 2.65% to 3.55%) and 0.90% (from 2.66% to 3.56%) in
21 Test Year 2011 and Escalation Year 2012, respectively.

22 DRA accepts the depreciation rates for accounts as provided by CWS, but
23 recommends that DRA perform an audit of CWS’ submitted Depreciation Study in
24 the next General Rate Case. The Depreciation Study should use a 0% salvage
25 value for small mains (<6” in diameter). This recommendation is consistent with

1 the procedure that CWS uses to replace these small mains, abandoning the old
2 main in place, when it is replaced.⁵⁹

3 Based on the annual depreciation rates for accounts as provided in CWS’
4 Depreciation Study the CWS estimates of implicit composite depreciation rates are
5 3.55% for Test Year 2011 and 3.56% for Escalation Year 2012. The DRA
6 estimates of implicit composite depreciation rates are 3.83% for Test Year 2011
7 and 3.84% for Escalation Year 2012.⁶⁰ Differences between CWS and DRA
8 estimates for composite depreciation rate are due to differences in Plant-in-Service
9 estimates and subsequent differences in Beginning of Year Gross Depreciable
10 Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates
11 are discussed in Chapter 7.

12 **2) Lucerne**

13 CWS depreciation rates for components listed in the CPUC Uniform
14 System of Accounts for Water Utilities are based on a “Depreciation Study as of
15 December 31, 2006” prepared by AUS Consultants dated June 21, 2007. If the
16 depreciation rates proposed in the study are used, instead of the depreciation rates
17 adopted in D.06-08-011, the overall composite depreciation rate for the Redwood
18 Valley Lucerne District increases by 2.85% (from 2.83% to 5.68%) and 2.77%
19 (from 2.80% to 5.57%) in Test Year 2011 and Escalation Year 2012, respectively.

20 DRA accepts the depreciation rates for accounts as provided by CWS, but
21 recommends that DRA perform an audit of CWS’ submitted Depreciation Study in
22 the next General Rate Case. The Depreciation Study should use a 0% salvage
23 value for small mains (<6” in diameter). This recommendation is consistent with

⁵⁹ For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4” main is \$0, this is also attached as Tab L in Appendix B to this report.

⁶⁰ Composite Depreciation Rates can be found in Workpaper 9-B2.

1 the procedure that CWS uses to replace these small mains, abandoning the old
2 main in place, when it is replaced.⁶¹

3 Based on the annual depreciation rates for accounts as provided in CWS’
4 Depreciation Study the CWS estimates of implicit composite depreciation rates are
5 5.68% for Test Year 2011 and 5.57% for Escalation Year 2012. The DRA
6 estimates of implicit composite depreciation rates are 5.88% for Test Year 2011
7 and 5.81% for Escalation Year 2012.⁶² Differences between CWS and DRA
8 estimates for composite depreciation rate are due to differences in Plant-in-Service
9 estimates and subsequent differences in Beginning of Year Gross Depreciable
10 Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates
11 are discussed in Chapter 7.

12 **3) Unified**

13 CWS depreciation rates for components listed in the CPUC Uniform
14 System of Accounts for Water Utilities are based on a “Depreciation Study as of
15 December 31, 2006” prepared by AUS Consultants dated June 21, 2007. If the
16 depreciation rates proposed in the study are used, instead of the depreciation rates
17 adopted in D.06-08-011, the overall composite depreciation rate for the Redwood
18 Valley Unified District increases by 1.61% (from 3.11% to 4.72%) and 1.55%
19 (from 3.07% to 4.62%) in Test Year 2011 and Escalation Year 2012, respectively.

20 DRA accepts the depreciation rates for accounts as provided by CWS, but
21 recommends that DRA perform an audit of CWS’ submitted Depreciation Study in
22 the next General Rate Case. The Depreciation Study should use a 0% salvage
23 value for small mains (<6” in diameter). This recommendation is consistent with

⁶¹ For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4” main is \$0, this is also attached as Tab L in Appendix B to this report.

⁶² Composite Depreciation Rates can be found in Workpaper 9-B2.

1 the procedure that CWS uses to replace these small mains, abandoning the old
2 main in place, when it is replaced.⁶³

3 Based on the annual depreciation rates for accounts as provided in CWS’
4 Depreciation Study the CWS estimates of implicit composite depreciation rates are
5 4.72% for Test Year 2011 and 4.62% for Escalation Year 2012. The DRA
6 estimates of implicit composite depreciation rates are 4.10% for Test Year 2011
7 and 4.10% for Escalation Year 2012.⁶⁴ Differences between CWS and DRA
8 estimates for composite depreciation rate are due to differences in Plant-in-Service
9 estimates and subsequent differences in Beginning of Year Gross Depreciable
10 Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates
11 are discussed in Chapter 7.

12 **D. CONCLUSION**

13 DRA reviewed and accepts the methodologies outlined in CWS’
14 Depreciation Study. DRA recommends an audit of CWS’ Depreciation Study in
15 the next GRC.

16 DRA recommends that the Commission adopt DRA’s adjusted numbers for
17 depreciation.

⁶³ For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4” main is \$0, this is also attached as Tab L in Appendix B to this report.

⁶⁴ Composite Depreciation Rates can be found in Workpaper 9-B2.

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	403.0	404.5	1.5	0.4%
Accruals				
Transportation Equipment	0.0	0.5	0.5	0.0%
Contributed Plant	0.0	0.0	0.0	0.0%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	92.0	98.9	6.9	7.5%
Total Accruals	92.0	99.4	7.4	8.0%
Retirements	(5.5)	(5.5)	0.0	0.0%
Depreciation Reserve - EOY	489.5	498.4	8.9	1.8%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	446.3	451.5	5.2	1.2%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	489.5	498.4	8.9	1.8%
Accruals				
Transportation Equipment	0.2	0.7	0.5	250.0%
Contributed Plant	0.0	0.0	0.0	0.0%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	91.8	98.7	6.9	7.5%
Total Accruals	92.0	99.4	7.4	8.0%
Retirements	(5.5)	(5.5)	0.0	0.0%
Depreciation Reserve - EOY	576.0	592.3	16.3	2.8%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	532.8	545.4	12.6	2.4%

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	1,145.0	1,167.2	22.2	1.9%
Accruals				
Transportation Equipment	6.3	7.4	1.1	17.5%
Contributed Plant	10.8	10.4	(0.4)	-3.7%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	151.0	164.2	13.2	8.7%
Total Accruals	168.1	182.0	13.9	8.3%
Retirements	0.0	0.0	0.0	0.0%
Depreciation Reserve - EOY	1,302.3	1,338.8	36.5	2.8%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	1,223.7	1,253.0	29.3	2.4%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	1,302.3	1,338.8	36.5	2.8%
Accruals				
Transportation Equipment	8.1	9.2	1.1	13.6%
Contributed Plant	12.0	11.5	(0.5)	-4.2%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	164.1	184.7	20.6	12.6%
Total Accruals	184.2	205.4	21.2	11.5%
Retirements	0.0	0.0	0.0	0.0%
Depreciation Reserve - EOY	1,486.5	1,544.2	57.7	3.9%
Weighting Factor	50%	50%		
1 Wtd. Avg. Depr. Reserve	1,388.4	1,435.7	47.3	3.4%

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	565.2	571.2	6.0	1.1%
Accruals				
Transportation Equipment	1.7	2.0	0.3	17.6%
Contributed Plant	1.3	1.6	0.3	23.1%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	68.2	138.4	70.2	102.9%
Total Accruals	71.2	142.0	70.8	99.4%
Retirements	0.0	0.0	0.0	0.0%
Depreciation Reserve - EOY	635.1	711.6	76.5	12.0%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	600.2	641.4	41.3	6.9%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
(Thousands of \$)				
Depreciation Reserve - BOY	635.1	711.7	76.6	12.1%
Accruals				
Transportation Equipment	1.7	2.0	0.3	17.6%
Contributed Plant	1.5	1.7	0.2	13.3%
Allocated non-reg contracts	0.0	0.0	0.0	0.0%
Other Plant in Service	68.1	140.0	71.9	105.6%
Total Accruals	71.3	143.7	72.4	101.5%
Retirements	0.0	0.0	0.0	0.0%
Depreciation Reserve - EOY	706.4	855.4	149.0	21.1%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	670.0	782.7	112.7	16.8%

CHAPTER 9: RATEBASE

A. INTRODUCTION

DRA and CWS' estimates for Rate Base for Test Year 2011 and Escalation Year 2012 are discussed in this Chapter.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends adoption of its estimates for: Plant in Service, Depreciation Reserve, and Rate Base.

C. DISCUSSION

Tables 9-1 & 9-2 show DRA's and CWS' estimates of Rate Base for Test Year 2011 and Escalation Year 2012. The significant differences between the Rate Base developed by DRA and CWS are due to the differences in the estimates for Weighted Average Plant in Service, Depreciation, Working Cash, and General Office Allocation.

D. NET-TO-GROSS MULTIPLIER

The net-to-gross multiplier represents the change in gross revenue required to produce a unit change in net revenue. Both DRA and CWS have calculated three multipliers which reflect: 1) the increase required under 100% equity-financing where State and Federal taxes are incurred; 2) the increase required under 100% debt financing where taxes are not incurred (identical to the increase necessary to offset expenses); and 3) the increase required for additions to ratebase, which incorporates the capital structure and financing costs of the utility.⁶⁵

⁶⁵ As adopted in Commission Decision 09-05-019

DRA and CWS use similar methodologies in calculating the net-to-gross multipliers. Calculations are shown in Table 9-3 and results are presented below. DRA's adjustment to the Domestic Production Activities Deduction (*see Chapter 5*) results in slightly higher numbers than those calculated by CWS.

**California Water Service Company
Redwood Coast Springs
Net to Gross Multiplier**

	CWS	DRA
100% Equity	1.60246	1.60964
100% Debt (expense)	1.00000	1.00000
Ratebase Additions	1.32159	1.32543

**California Water Service Company
Redwood Lucerne
Net to Gross Multiplier**

	CWS	DRA
100% Equity	1.61964	1.70575
100% Debt (expense)	1.01072	1.01072
Ratebase Additions	1.33576	1.38173

**California Water Service Company
Redwood Unified
Net to Gross Multiplier**

	CWS	DRA
100% Equity	1.47166	1.62058
100% Debt (expense)	1.00447	1.00447
Ratebase Additions	1.25386	1.33335

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Serv.	990.2	2,284.6	1,294.4	130.7%
Materials & Supplies	1.6	1.6	0.0	0.0%
Working Cash - Lead-Lag	28.8	39.4	10.6	36.6%
Amt withheld from Employees	0.2	(0.2)	-0.4	-200.0%
Wtd. Avg. Depr. Res.	(446.3)	(451.5)	(5.2)	1.2%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	0.0	0.0	0.0	0.0%
Contributions	(1.0)	(1.0)	0.0	0.0%
Reserved Amort.Intangibles	52.4	57.8	5.4	10.3%
Deferred Taxes	73.3	73.3	0.0	0.0%
Unamortized ITC	0.0	0.0	0.0	0.0%
General Office Alloc	49.4	49.4	0.0	0.0%
Taxes on - Advances	0.0	0.0	0.0	0.0%
Taxes on - CIAC	21.7	21.7	0.0	0.0%
Average Rate Base	521.0	1,815.0	1,294.0	248.4%
Interest Calculation:				
Avg Rate Base	521.0	1,774.2	1,253.2	240.5%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	16.5	56.1	39.6	240.5%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	16.5	56.1	39.6	240.5%

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Service	988.6	2,321.4	1,332.8	134.8%
Material & Supplies	1.6	1.6	0.0	0.0%
Working Cash - Lead-Lag	26.6	41.0	14.4	54.3%
Amt withheld from Employees	0.2	(0.2)	-0.4	-200.0%
Wtd. Avg. Depr. Reserve	(532.8)	(545.4)	(12.6)	2.4%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	0.0	0.0	0.0	0.0%
Contributions	(1.0)	(1.0)	0.0	0.0%
Reserved Amort.Intangibles	63.4	72.4	9.0	14.2%
Deferred Taxes	78.4	78.4	0.0	0.0%
Unamortized ITC	0.0	0.0	0.0	0.0%
General Office Alloc	48.0	48.0	0.0	0.0%
Taxes on - Advances	0.0	0.0	0.0	0.0%
Taxes on - CIAC	20.8	20.8	0.0	0.0%
Average Rate Base	412.3	1,737.4	1,325.1	321.4%
Interest Calculation:				
Avg Rate Base	412.3	1,695.0	1,282.7	311.1%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	13.0	53.6	40.5	311.1%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	13.0	53.6	40.5	311.1%

1

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
COAST SPRINGS RATE AREA
REDWOOD VALLEY DISTRICT
NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	0.00000%	0.00000%
2) 1-Uncoll (100%-line 1)	100.00000%	100.00000%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	0.00000%	0.00000%
8) 1-Subtotal (100%-line 7)	100.00000%	100.00000%
9) CCFT (line 8 * 8.84%)	8.84000%	8.84000%
10) Domestic Production Activities Deduction *	8.20440%	9.00000%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	29.03446%	28.75600%
12) Total taxes paid (ln 7+ln 9+ln 10)	37.87446%	37.59600%
13) Net after taxes (1-line 11)	62.12554%	62.40400%

Net-to-Gross Multiplier (1/line 12) = 1.60964 (DRA)
Net-to-Gross Multiplier (1/line 12) = 1.60246 (Utility)

* DRA - Line 8 minus Line 9 multiplied by 9% multiplied by percentage of Qualified Activities
CWS - only multiplies Line 8 by 9%.

This net-to-gross multiplier is to be used for changes in net revenue attributable to rate of return changes only and not to be used for rate base offsets. The net-to-gross for rate base offsets is much lower because the interest payments for the debt portion of rate base increase is tax deductible.

1

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Serv.	5,147.6	6,302.1	1,154.5	22.4%
Materials & Supplies	4.5	4.5	0.0	0.0%
Working Cash - Lead-Lag	113.2	146.7	33.5	29.6%
Amt withheld from Employees	0.6	(0.6)	-1.2	-200.0%
Wtd. Avg. Depr. Res.	(1,223.7)	(1,253.0)	(29.3)	2.4%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	0.0	0.0	0.0	0.0%
Contributions	166.2	166.4	0.2	0.1%
Reserved Amort.Intangibles	8.6	19.2	10.6	123.3%
Deferred Taxes	447.9	447.9	0.0	0.0%
Unamortized ITC	0.0	0.0	0.0	0.0%
General Office Alloc	181.0	181.0	0.0	0.0%
Taxes on - Advances	0.0	0.0	0.0	0.0%
Taxes on - CIAC	23.0	23.0	0.0	0.0%
Average Rate Base	3,623.5	4,770.2	1,146.7	31.6%
Interest Calculation:				
Avg Rate Base	3,623.5	4,619.6	996.1	27.5%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	114.5	146.0	31.5	27.5%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	114.5	146.0	31.5	27.5%

1

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Service	5,571.0	6,988.3	1,417.3	25.4%
Material & Supplies	4.5	4.5	0.0	0.0%
Working Cash - Lead-Lag	110.3	153.0	42.7	38.7%
Amt withheld from Employees	0.6	(0.6)	-1.2	-200.0%
Wtd. Avg. Depr. Reserve	(1,388.4)	(1,435.7)	(47.3)	3.4%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	0.0	0.0	0.0	0.0%
Contributions	178.1	178.7	0.6	0.3%
Reserved Amort.Intangibles	9.5	27.2	17.7	186.3%
Deferred Taxes	467.3	467.3	0.0	0.0%
Unamortized ITC	0.0	0.0	0.0	0.0%
General Office Alloc	175.6	175.6	0.0	0.0%
Taxes on - Advances	0.0	0.0	0.0	0.0%
Taxes on - CIAC	22.5	22.5	0.0	0.0%
Average Rate Base	3,841.2	5,234.5	1,393.3	36.3%
Interest Calculation:				
Avg Rate Base	3,841.2	5,077.6	1,236.4	32.2%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	121.4	160.5	39.1	32.2%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	121.4	160.5	39.1	32.2%

1

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
LUCERNE RATE AREA
REDWOOD VALLEY DISTRICT
NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	1.06087%	1.06087%
2) 1-Uncoll (100%-line 1)	98.93913%	98.93913%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	1.06087%	1.06087%
8) 1-Subtotal (100%-line 7)	98.93913%	98.93913%
9) CCFT (line 8 * 8.84%)	8.74622%	8.74622%
10) Domestic Production Activities Deduction *	0.00000%	8.90452%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	31.56752%	28.45094%
12) Total taxes paid (ln 7+ln 9+ln 10)	41.37461%	38.25803%
13) Net after taxes (1-line 11)	58.62539%	61.74197%

Net-to-Gross Multiplier (1/line 12) = 1.70575 (DRA)
Net-to-Gross Multiplier (1/line 12) = 1.61964 (Utility)

* DRA - Line 8 minus Line 9 multiplied by 9% multiplied by percentage of Qualified Activities
CWS - only multiplies Line 8 by 9%.

This net-to-gross multiplier is to be used for changes in net revenue attributable to rate of return changes only and not to be used for rate base offsets. The net-to-gross for rate base offsets is much lower because the interest payments for the debt portion of rate base increase is tax deductible.

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TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Serv.	1,485.0	2,801.4	1,316.4	88.6%
Materials & Supplies	1.9	1.9	0.0	0.0%
Working Cash - Lead-Lag	30.8	52.7	21.9	71.2%
Amt withheld from Employees	(0.2)	(0.2)	0.0	0.0%
Wtd. Avg. Depr. Res.	(600.2)	(641.4)	(41.3)	6.9%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	0.0	0.0	0.0	0.0%
Contributions	28.9	28.8	(0.1)	-0.3%
Reserved Amort.Intangibles	2.8	2.8	0.0	0.0%
Deferred Taxes	124.7	124.7	0.0	0.0%
Unamortized ITC	0.0	0.0	0.0	0.0%
General Office Alloc	41.5	61.7	20.2	48.7%
Taxes on - Advances	0.0	0.0	0.0	0.0%
Taxes on - CIAC	2.8	2.8	0.0	0.0%
Average Rate Base	805.2	2,122.6	1,317.4	163.6%
Interest Calculation:				
Avg Rate Base	805.2	2,068.2	1,263.0	156.8%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	25.4	65.4	39.9	156.8%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	25.4	65.4	39.9	156.8%

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TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA	
			Amount	%
(Thousands of \$)				
Wtd.Avg. Plant in Service	1,488.3	2,889.5	1,401.2	94.1%
Material & Supplies	1.9	1.9	0.0	0.0%
Working Cash - Lead-Lag	31.2	73.4	42.2	135.6%
Amt withheld from Employees	(0.2)	(0.2)	0.0	0.0%
Wtd. Avg. Depr. Reserve	(670.0)	(782.7)	(112.7)	16.8%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	0.0	0.0	0.0	0.0%
Contributions	30.3	30.3	0.0	0.0%
Reserved Amort.Intangibles	5.8	5.8	0.0	0.0%
Deferred Taxes	168.5	168.5	0.0	0.0%
Unamortized ITC	0.0	0.0	0.0	0.0%
General Office Alloc	36.0	59.8	23.8	66.1%
Taxes on - Advances	0.0	0.0	0.0	0.0%
Taxes on - CIAC	2.8	2.8	0.0	0.0%
Average Rate Base	685.3	2,039.9	1,354.5	197.6%
Interest Calculation:				
Avg Rate Base	685.3	1,964.8	1,279.4	186.7%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	21.7	62.1	40.4	186.7%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	21.7	62.1	40.4	186.7%

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TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
UNIFIED RATE AREA
REDWOOD VALLEY DISTRICT
NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	0.44492%	0.44492%
2) 1-Uncoll (100%-line 1)	99.55508%	99.55508%
3) Franchise tax rate	0.00000%	0.00000%
4) Local Franchise (line 3*line 2)	0.00000%	0.00000%
5) Business license rate	0.00000%	0.00000%
6) Business license (line 5*line 2)	0.00000%	0.00000%
7) Subtotal (line 1+line 4+line 6)	0.44492%	0.44492%
8) 1-Subtotal (100%-line 7)	99.55508%	99.55508%
9) CCFT (line 8 * 8.84%)	8.80067%	8.80067%
10) Domestic Production Activities Deduction *	7.75950%	8.95996%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	29.04822%	22.80409%
12) Total taxes paid (ln 7+ln 9+ln 10)	38.29381%	32.04968%
13) Net after taxes (1-line 11)	61.70619%	67.95032%

Net-to-Gross Multiplier (1/line 12) = 1.62058 (DRA)

Net-to-Gross Multiplier (1/line 12) = 1.47166 (Utility)

* DRA - Line 8 minus Line 9 multiplied by 9% multiplied by percentage of Qualified Activities
CWS - only multiplies Line 8 by 9%.

This net-to-gross multiplier is to be used for changes in net revenue attributable to rate of return changes only and not to be used for rate base offsets.
The net-to-gross for rate base offsets is much lower because the interest payments for the debt portion of rate base increase is tax deductible.

1

CHAPTER 10: CUSTOMER SERVICE

A. INTRODUCTION

DRA has reviewed California Water Service Company's ("CWS") filing, responses to DRA data requests, and data obtained from the Commission's Consumer Affairs Branch regarding customer complaints in the Redwood Valley District.

B. SUMMARY OF RECOMMENDATIONS

DRA finds CWS' customer service record satisfactory and the customer service process reasonable.

C. DISCUSSION

1) Customer calls and complaints

The customer service representatives ("CSR") in the district office handle all customer complaint calls. When a customer calls the district office, the CSR logs the date and time of the call along with a description of the complaint into the Customer Service Information system. The majority of customer complaints are resolved the same day they are received. Billing questions make up a large portion of the calls received by the district office. The CSR tries to resolve the billing issue directly. However, if a resolution can not be reached, the Customer Services Manager in each district is empowered to make billing adjustments as needed.

All customer complaints filed with the Commission are sent to the CWS rates department and follow a different procedure than described above. The rates department contacts the district office to inform them of the complaint with the goal of resolving the issue within 7 days. The district office researches the complaint, contacts the customer to inform them of the investigations findings and works to reach a resolution. Then the district office submits its findings and resolution to CWS' rates department for review. CWS' rates department then

1 contacts the Commission's Division of Water and Audits or the Consumer Affairs
2 branch to present the complaint findings. Complaints filed by customers with the
3 Commission since the last GRC were few in number. In general, most of the filed
4 complaints regarded billing, with one concerning water quality.

5 **2) Water Quality complaints**

6 CWS' records indicate that the number of water quality complaints have
7 been low relative to the number of customers in the Redwood Valley District. An
8 effective system is in place to receive and record customer complaints concerning
9 water quality. Customer complaints regarding taste and odor are handled by a CSR
10 who explains to the customer why those types of conditions occur. Other types of
11 complaints, such as low pressure or the presence of sand in the water, require a
12 serviceman to go out to the premises and investigate the complaint. When a
13 service call is required, the CSR notifies the maintenance department. CWS
14 assigns personnel to investigate the problem, notify the customer, and resolve the
15 issue. The majority of these complaints are resolved by inspecting the premises.
16 CWS tracks all water quality complaints in their system and records them on a
17 monthly summary report.

18 Table 10-A shows water quality customer complaint data for the last three
19 years. There are six categories for the different kinds of water quality complaints.
20 These categories are defined as:

- 21 • Air - can be trapped in water causing a milky appearance which goes
22 away when allowed to stand and the air goes to the surface;
- 23 • Dirty - can be discolored water or sand in the water from mainline
24 flushing or a main break in the area;
- 25 • Noise - can be associated with the water system, such as wells
26 turning on, or the customer's internal plumbing;
- 27 • Pressure - can be too high or too low; and

- Taste or odor - can be stronger than usual from chlorine, or a musty odor the customer is not accustomed to.

Table 10-A

Redwood Valley District Customer Water Quality Complaints			
<u>Type</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Air	0	2	31
Dirty water	12	4	0
Noise	0	1	18
Pressure	9	21	1
Sand	0	0	0
Taste/Odor	1	2	2
Total	22	30	52
Number of Customers	1,959	1,958	1,951
Total as % of Customers	1.1%	1.5%	2.7%

CWS did not track water quality complaints by service areas, only for the whole district. In 2008 there were 31 complaints regarding air. CWS explains that air can enter the system as a result of normal operations. There are two different types of air issues that can occur in a water system: 1) air build-up can occur when there is a temporary operational change to the water system, such as closing a valve, or 2) when certain maintenance activities are performed. This can cause intermittent sputtering of air out of a faucet. Entrained air occurs when air enters the water system during the water treatment process or is released from groundwater. Entrained air can cause the water to look white or “milky.” This unusual appearance is safe, and the air will dissipate when allowed to stand in a glass or pitcher.

In response to a DRA data request (ALC-006) regarding these air complaints, CWS explains:

The air complaints are district-wide (sex separate systems), and do not appear to be related to a specific area, event or issue. Air complaints can be the result of main line leaks, service line leaks, entrained air from pumps, to not a few

1 of the potential reasons for the air. District personnel indicated there were not any
2 significant changes in operations that may have caused the increase in this type of
3 complaint. The district will continue to monitor this issue, and if the number of
4 complaints continues to increase, or does not return to previous minimal levels,
5 then the district will analyze the complaints by system to determine the reason for
6 the air in the water.

7 In 2008, there were 18 complaints related to noise. CWS states that the
8 noise complaint classification encompasses several different issues. Water noise
9 complaints are usually caused by the customer's plumbing, but CWS always sends
10 service personnel to investigate. The service personnel determine if the noise is
11 originating from the CWS system or from the customer's plumbing and offers tips
12 to the customer if it is determined to be their plumbing.

13 Problems with the CWS system are reported to district management for
14 further investigation and remediation. A problem could be caused by: 1) an
15 improperly operating pressure reducing valve; 2) surges when a control valve in
16 the system is opened or closed too rapidly; and 3) crews have opened or closed a
17 fire hydrant to flush a main, or to conduct a fire flow test. All noise complaints are
18 taken seriously and investigated promptly. While most noise issues are not serious,
19 CWS investigates to make certain the problem is not, or does not become, serious
20 enough to cause damage to the water system.

21 There were 21 complaints in 2007 regarding pressure. CWS determined
22 that the problem, in most cases, was due to the customer's plumbing, such as
23 service lines being clogged. Other pressure complaints related to inadequately
24 sized mains for the demand placed on them resulting in lowered pressure. Pressure
25 complaints can also be related to main leaks or repairs of main leaks. All
26 complaints were investigated and resolved to the customer's satisfaction.

1 **D. CONCLUSION**

2 DRA recommends the Commission find CWS' customer service to be
3 satisfactory.

CHAPTER 11: RATE DESIGN

A. INTRODUCTION

In this GRC application (09-07-001), CWS requested changes to the non-residential rate design in Special Request #6, and requested changes to the residential rate design in Special Request #11. Thus, the scope of this chapter is limited to recommendations regarding:

- 1) The Water Revenue Adjustment Mechanism and Modified Cost Balancing Accounts (“WRAM/MCBA”),⁶⁶
- 2) Impacts of the conservation rate designs to date
- 3) Impacts on Low Income customer disconnections, and
- 4) Low income rate assistance surcharges
- 5) Removal of WRAM/MCBA in Redwood Valley

B. SUMMARY OF RECOMMENDATIONS

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

DRA recommends that the Commission require CWS to modify the WRAM/MCBA so that it does not disproportionately disadvantage ratepayers compared to shareholders. The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that if there are reductions in consumption, ratepayers and shareholders should split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

⁶⁶ Other than recommendations regarding WRAM/MCBA in DRA’s special request chapters.

1 **1) b. WRAM/MCBA surcredits should be a flat amount applied to the**
2 **service charge**

3 When there is a combined over-collection in the WRAM/MCBA, the over-
4 collection should be passed on to ratepayers through a flat surcredit on the service
5 charge. This change to the surcredit mechanism will ensure that water-conserving
6 customers who use less water do not receive less surcredit than customers who use
7 large quantities of water. This will enhance the conservation price signal.

8 **2) Not Yet Enough Data to Determine Impacts of Conservation Rate**
9 **Designs**

10 This GRC application from CWS contains six months of consumption data
11 after CWS implemented the rate design and WRAM/MCBA mechanism Trial
12 Programs. Six months of consumption data is not long enough to draw
13 conclusions about the impacts of the conservation rate designs. The Commission
14 should evaluate the impacts of the conservation rate designs in CWS' next GRC.

15 **3) The Commission should require CWS to monitor disconnections by**
16 **month and communicate payment options to customers**

17 The Commission should require CWS to continue to track the number of
18 residential and LIRA customer disconnections per month. If the number of
19 disconnections has increased, CWS should develop a low-cost customer
20 communication plan to reduce the number of disconnections. In particular, CWS
21 should place messaging in customers' bills and on its website explaining to
22 customers the options that are available to them if they cannot pay their bills.

23 **4) The Commission should authorize CWS to increase the surcharge**
24 **for the low-income rate assistance program as necessary to continue**
25 **to provide the benefit to qualifying customers**

26 CWS states that it proposed to increase the surcharge to fund the low-

1 income rate assistance (“LIRA”) program.⁶⁷ DRA supports an increase in
2 the surcharge to support the forecasted participation levels in the LIRA program.

3 **5) The Commission should require CWS to Remove Redwood Valley’s**
4 **WRAM/MCBA Decoupling Mechanism**

5 The Commission should require CWS to remove Kern River Valley’s
6 WRAM/MCBA decoupling mechanism because CWS did not implement
7 conservation rates in this district, and has no plan to do so during this GRC cycle.

8 **C. DISCUSSION**

9 **1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the**
10 **Full Burden of the Economic Downturn**

11 When the Commission adopted the WRAM/MCBA decoupling mechanism
12 for CWS, the concept of the mechanism was to ensure a proportional impact on
13 the utility and ratepayers when CWS implemented conservation rates. DRA’s
14 settlement with CWS, adopted in D.08-02-036 states:

15 “Parties agree that the desired outcome and purpose of using
16 WRAMs and MCBA is to ensure that the utility and
17 ratepayers are proportionally affected when conservation
18 rates are implemented.

- 19 a. In the context of this agreement, a proportional impact
20 means that, if consumption is over or under the
21 forecasted level, the effect on either the utility or
22 ratepayers (as a whole) should reflect that the costs or
23 savings resulting from changes in consumption will be
24 accounted for in a way such that neither the utility or
25 ratepayers are harmed, or benefit, at the expense of the
26 other party.”⁶⁸

⁶⁷ Report on the Results of Operation, July 1, 2009.

⁶⁸ Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

1 Since it is too early to evaluate quantitative usage data on the impacts of the
2 conservation rate designs,⁶⁹ it is difficult to determine how much sales have
3 decreased due to the effects of conservation oriented rates. But it is unreasonable
4 to assume that all recorded decrease in sales was entirely due to conservation
5 oriented rates and conservation programming, as it is certain that some portion of
6 the decrease was due to the economic downturn and other factors. Yet, as a result
7 of the WRAM/MCBA, ratepayers are currently bearing the full cost of the
8 economic downturn. This issue must be addressed immediately. Therefore, until
9 the impacts of conservation efforts can be better quantified, DRA recommends
10 that the Commission modify the WRAM so that if there are reductions in
11 consumption, rather than ratepayers being required to pay the full difference
12 between the authorized quantity revenue and actual quantity revenue, ratepayers
13 and shareholders split this difference equally. This will ensure that ratepayers and
14 shareholders are proportionally affected under the WRAM/MCBA decoupling
15 mechanism, when conservation rates are implemented in accordance with the
16 settlement.⁷⁰

17 This issue should be examined in the next GRC, when over three years of
18 consumption information will be available after the implementation of the
19 WRAM/MCBAs and conservation rates. However, it is clear at this time that the
20 WRAM/MCBA mechanisms have led to an unintended consequence: the WRAM
21 shields shareholders from all financial consequences of the severe economic
22 downturn, while ratepayers bear the full cost of the economic downturn. This is

⁶⁹ At the time CWS filed this GRC, there were only six months of usage data after implementation of the WRAM/MCBA and rate design Trial Programs, and CWS did not provide an analysis of this usage information to determine whether the utility and ratepayers are proportionally affected when conservation rates were implemented.

⁷⁰ Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

1 an unintended consequence of the WRAM/MCBA trial program, not one of the
2 goals of the program.⁷¹

3 While there is not currently a method available to apportion reductions in
4 usage to each different cause – such as conservation and changes in economic
5 conditions, it is clear that there are different factors that can affect water usage and
6 each of them contribute to usage reductions. This is contrary to the
7 WRAM/MCBA, which compensates CWS for all of the reductions in
8 consumption, not just usage reductions from conservation. The Commission
9 should modify the WRAM/MCBA mechanism so that it does not
10 disproportionately disadvantage ratepayers compared to shareholders.

11 Further, the Commission specifically addressed the possible impact of a
12 WRAM/MCBA for California American Water Company during an economic
13 downturn in decision 08-06-002, p. 16, which stated:

14 “One disparate impact that could occur in the Pilot
15 Program period would be a severe economic downturn
16 in one or more of the Los Angeles service areas that
17 causes a significant decrease in revenues. This could
18 occur from a high rate of home foreclosures and/or
19 business slowdowns or shutdowns. We find this would
20 clearly be a disparate impact as the WRAM mechanism
21 would shield shareholders from all financial
22 consequences of the economic downturn while
23 requiring ratepayers to bear the full cost. Since Cal-Am
24 will be tracking sales levels by customer class and
25 service area, any disparate impact can be quickly seen
26 and addressed.”

⁷¹ The goals of the WRAM/MCBA mechanism trial program were three-fold:

- a) “Sever the relationship between sales and revenue to remove any disincentive for the utility to implement conservation rates and conservation programs
- b) Ensure cost savings resulting from conservation are passed on to ratepayers.
- c) Reduce overall water consumption by Cal Water ratepayers.” (see the Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 8, section VI.1. Filed June 15, 2007, adopted in Decision 08-02-036).

1 CWS tracks sales levels by customer class and service area; and it is
2 possible to calculate and graph changes in consumption in different classes and
3 service areas. However, it is much more complex to determine or even speculate
4 about the reasons for the changes in consumption. Especially because of the
5 significant economic downturn in recent years, that happens to coincide with
6 implementation of increasing block rates, makes it difficult to draw conclusions
7 about the reasons for any changing consumption patterns. Also, all CWS' districts
8 undercollected revenue in the WRAM account during July – December 2008,
9 except Bakersfield, King City, and Palos Verdes.⁷² This is an indication that sales
10 were lower than forecasted for almost all districts during this timeframe.

11 The WRAM should no longer require ratepayers to pay the full difference
12 between the authorized quantity revenue and actual quantity revenue. The
13 Commission should modify the WRAM/MCBA so that ratepayers and
14 shareholders split this difference equally. This will ensure that ratepayers and
15 shareholders are proportionally affected when conservation rates are implemented.

16 **1) b. WRAM/MCBA Surcredits Should Be a Flat Amount**
17 **Applied to the Service Charge**

18 When there is a combined under-collection in the WRAM/MCBA, this
19 should be recovered from ratepayers through volumetric surcharges, in accordance
20 with Decision 08-02-036. This maintains the conservation price signals of the
21 surcharge because customers who use more water pay a larger portion of the
22 surcharge. However, when there is a combined over-collection in the
23 WRAM/MCBA, this should be passed on to ratepayers through a flat surcredit on
24 the service charge. This change to the surcredit mechanism will ensure that water-
25 conserving customers who use less water do not receive less surcredit than
26 customers who use large quantities of water. Furthermore, this will also enhance
27 the conservation price signal.

⁷² CWS WRAM/MCBA report to the Division of Water and Audits, March 2009

1 This recommendation is important in light of the first six months of
2 WRAM/MCBA and Rate Design Trial Program implementation where the over
3 and under-collections in the net balance of the WRAM/MCBA typically were far
4 greater than the 2.5%⁷³ trigger. In fact these balances were 10% or greater in
5 seven districts, and were between 5% and 10% in another seven districts.⁷⁴

6 **2) Not Yet Enough Data to Determine Impacts of Conservation**
7 **Rate Designs**

8 DRA and CWS reached a settlement agreement on rate design and revenue
9 decoupling on April 23, 2007, and amended the settlement on June 15, 2007. The
10 Commission ultimately adopted the settlement on February 28, 2008 in decision
11 08-02-036, and CWS had 90 days after the Commission decision adopting the
12 settlement before the Trial Program became effective. CWS implemented the
13 Trial Program, including the WRAM/MCBAs and conservation rate designs, via
14 Advice Letter 1855, which became effective on July 1, 2008. CWS filed this GRC
15 application in July 2009, and included data through December 2008. Thus, this
16 GRC contains six months of consumption data after CWS implemented the
17 WRAM/MCBA mechanisms. Six months of consumption data is not long enough
18 to draw conclusions about the impacts of the conservation rate designs.⁷⁵

19 **3) CWS should track low income disconnections on a monthly**
20 **basis and provide this information in its annual report to the**
21 **Commission on the WRAM/MCBA balances**

22 Ordering Paragraph 6 from the Phase 1A Decision 08-02-036 from the
23 conservation OII (I.07-01-022) (“OP6”) requires CWS to provide data related to

⁷³ The trigger is “2.5% of the district’s total recorded revenue requirement for the prior calendar year” (see Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, Section IX 3) d., Filed June 15, 2007, adopted in Decision 08-02-036.

⁷⁴ See CWS WRAM/MCBA report to the Division of Water and Audits, March 2009.

⁷⁵ See Special Request #11 for further discussion.

1 the implementation of the conservation rate design trial programs. Specifically,
2 OP6 states:

3 “6. Suburban, Park, and CalWater shall provide the
4 following information in their next general rate case:
5 monthly or bimonthly (depending upon the billing
6 cycle) ... increase or decrease in disconnecting low-
7 income program participants for nonpayment by
8 district after adoption of conservation rate designs;
9 increase or decrease in low-income program
10 participation by district after adoption of conservation
11 rate designs; increase or decrease in residential
12 disconnections for nonpayment by district after
13 adoption of conservation rate designs....”
14

15 In this GRC application, CWS provided some of the information required
16 in this Ordering Paragraph.⁷⁶ In particular, CWS provided information on
17 customer disconnections for both residential and LIRA customer groups for the
18 first six months of Trial Program implementation between July 1, 2008 and
19 December 31, 2008. However, this data incorrectly “double-counted” low income
20 customer disconnections.⁷⁷ CWS provided corrected data for July 2008 through
21 July 2009. However, CWS did not yet provide information about customer
22 disconnections prior to July 2008.⁷⁸ In order for the Commission to assess the
23 “increase or decrease” in low-income disconnections when CWS implemented the

⁷⁶ Prepared Testimony of David Morse, p. 28 – 31.

⁷⁷ Email from CWS (Tu Rash), on 1/13/2010, states regarding the query Cal Water originally ran for Dave Morse “in effect that query double counted the number of LIRA customers.”

⁷⁸ DRA requested information on residential and LIRA customer disconnections from July 2007 through July 2009 in LWA-5 on 12/22/09, and CWS provided an initial response on 12/31/09, but it did not correspond to the numbers in David Morse’ testimony, so CWS provided a revised response on 1/5/2010, but this still did not correspond to the numbers in David Morse’ testimony. CWS provided a further revised response on 1/13/2010, but this only provided data from 2008-2009. At the time DRA had to finalize this testimony, it had not yet received final numbers for residential and LIRA customer disconnections from July 2007 through 2009, although DRA is confident CWS would have provided the information to comply with this ordering paragraph had there been unlimited time.

1 conservation rate design and WRAM/MCBA Trial Programs, pursuant to the
2 above Ordering Paragraph, data on customer disconnections from before and after
3 the implementation of the conservation rate designs must be compared. Since
4 CWS only provided information from after the implementation of conservation
5 rate designs, this is not in compliance with OP 6. DRA believes CWS intended to
6 provide the correct information and CWS should provide this information in its
7 rebuttal testimony so that the Commission can consider it in this proceeding.

8 On a going forward basis, the Commission should require CWS to continue
9 to track the number of residential and LIRA customer disconnections per month
10 and report this information in the annual report that CWS submits to the
11 Commission by March 31 each year regarding WRAM/MCBA balances.⁷⁹ If the
12 number of disconnections has increased, CWS should develop and implement a
13 low-cost customer communication plan to reduce the number of disconnections.
14 In particular, CWS should place messaging on customer bills and on CWS'
15 website explaining to customers the options that are available to them if they
16 cannot pay their bills. For example, PG&E has a message on its website that says:

17 "We Know Times Are Tough.
18 If you or someone you know is having trouble paying
19 your bill, we can help. Please call us today at 1-800-
20 743-5000 so we can discuss program options and
21 payment arrangements that work for you."⁸⁰

22 Another example is San Diego Gas and Electric Company,
23 which has messaging on its website that provides a rotational link to

⁷⁹ Pursuant to "Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues," section IX 3), Filed June 15, 2007, adopted in Decision 08-02-036.

⁸⁰ <http://www.pge.com/myhome/> (accessed 1/28/2010).

1 “Need Extra Help With Your Bill? Learn about available assistance”

2 and “Get extra help with your bill.”⁸¹

3 **4) The Commission should authorize CWS to increase the**
4 **surcharge for the low-income rate assistance program as**
5 **necessary to continue the benefit for qualifying customers**

6 CWS states that it proposed to increase the surcharge to fund the low-
7 income rate assistance (“LIRA”) program.⁸² The Commission authorized the
8 LIRA program in D.06-11-053, and it provides a 50% discount on the service
9 charge to qualifying households. DRA supports the continuation of the LIRA
10 program as authorized in D.06-11-053. To the extent that an increase in the
11 surcharge is necessary to support the LIRA program at forecasted participation
12 levels, the Commission should authorize the increase in the surcharge. DRA notes
13 that this surcharge is combined with the surcharge for the Rate Support Fund
14 (“RSF”) and that CWS’ requested increase from \$0.009 to \$0.015 per ccf⁸³ also
15 includes the additional funding to support CWS’ increases in the RSF subsidies.
16 For this reason, the required increase in the surcharge to support only the LIRA
17 program should be lower than \$0.015 per ccf and should be calculated based upon
18 the final revenue requirement in this case as well as the adopted rate of
19 participation in the LIRA program.

20 **5) The Commission Should Require CWS to Remove Redwood**
21 **Valley’s WRAM/MCBA Decoupling Mechanism**

22 The CWS districts where CWS did not implement conservation rates
23 should not have a WRAM/MCBA mechanism. In the settlement that the
24 Commission adopted in the Water Conservation Order Instituting Investigation

⁸¹ <http://www.sdge.com/index/> (accessed 1/28/2010).

⁸² Report on the Results of Operation, July 1, 2009, Chapter 12 “Present and Requested Tariffs” states that customers pay a surcharge of \$0.009 per Ccf to fund the program and that CWS proposes to increase the surcharge to \$0.015 per Ccf.

⁸³ Additional Prepared Testimony of Thomas Smegal, Special Request 11, p. 15, lines 21-22.

1 (D.08-02-036), the parties agreed that “Group 3” districts (Antelope Valley –
2 Fremont, Kern River Valley, and Redwood Valley – Lucerne, Coast Springs and
3 United) would not have conservation rates during the Trial Program.⁸⁴ However,
4 the parties agreed to revisit this in the next GRC.⁸⁵

5 The purpose of the WRAM/MCBA mechanism is to take away CWS’
6 disincentive to implement conservation rates. As stated in the settlement adopted
7 in D.08-02-036, one of the goals of the decoupling mechanisms in the Trial
8 Program is to “(s)ever the relationship between sales and revenue to remove any
9 disincentive for the utility to implement conservation rates and conservation
10 programs.”⁸⁶ If no increasing block rates are implemented, a WRAM/MCBA is
11 not warranted. It appears to be an oversight from the settlement that each district
12 has a WRAM/MCBA, rather than applying a WRAM/MCBA to each district with
13 conservation rates. The Commission should require CWS to remove the
14 WRAM/MCBA from Antelope Valley-Fremont, Kern River Valley, and Redwood
15 Valley – Lucerne, Coast Springs and United districts.

16 The features of the Group 3 districts are shown in the table below.

⁸⁴ “Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company,” filed 6/15/07, D.08-02-036, p. 3, Section IV. 1) c.

⁸⁵ “Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company,” filed 6/15/07, D.08-02-036, p. 6, Section IV. 5) d.

⁸⁶ “Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company,” filed 6/15/07, D.08-02-036, Section VI. 1) a.

1 Table 1 – Features of CWS’ Group 3 Districts

District	CWS proposed % increase in Revenue Requirement⁸⁷	Estimated Median Annual Household Income (2000)- ^{88 89}	Proposed Bill for typical customer use in 2011 after RSF subsidy⁹⁰
Kern River Valley	36.5%	\$31,537	\$81.36
Antelope Valley (Fremont)	73.1%	\$47,622	\$77.42
RV – Coast Springs	154.8%	\$47,679	\$185.45
RV – Unified	86.3%	\$40,404	\$149.08
RV – Lucerne	54.9%	\$25,345	\$84.09

2 The proposed bills for typical customers would be even higher than shown
3 if not for the RSF subsidy (see DRA’s testimony regarding Special Request #11).
4 Given the high water rates in the Group 3 districts as well as the proposed
5 substantial rate increases, the low median income, and high number of low-income
6 customers, the customers in the Group 3 districts should not have a
7 WRAM/MCBA decoupling mechanism. Furthermore these customers, in
8 particular, should not bear the full additional risk from a decrease in sales, as
9 would be the case under the current WRAM/MCBA mechanism.⁹¹

⁸⁷ Application 09-07-001, Attachment G – Notices to Customers.

⁸⁸ Estimates of median household income for 2000 census are from
<http://www.calmis.ca.gov/file/demoinc/INC2000-Place.XLS>; accessed January 12, 2010

⁸⁹ DRA Report on the Application of California Water Service for a Rate Base Equalization
Account (RBEA), December 19, 2005.

⁹⁰ Application 09-07-001, Attachment G – Notices to Customers; for RSF districts, this average
bill includes the RSF subsidy.

⁹¹ Decision 08-08-030 in proceeding I.07-01-022, Finding of Fact 19 states: “The Commission
(continued on next page)

1 **D. CONCLUSION**

2 The Commission should adopt the recommendations on rate design and
3 revenue decoupling included in this chapter.

(continued from previous page)
generally has found that decoupling mechanisms reduce risk, all other things being equal.”

CHAPTER 12: WATER QUALITY

A. INTRODUCTION

The Rate Case Plan requires water utilities to submit information about water quality in their GRC applications. This Chapter presents DRA's review of water quality submittals by California Water Service Company ("CWS") for the Redwood Valley District and CWS' responses to DRA's data request.

The California Department of Public Health ("CDPH") is the primary agency responsible for ensuring that the water provided to the public by the District is safe for consumption. DRA reviewed the most recent CDPH inspection report and the District's response, if available, and the CDPH's response to DRA's inquiry on the District's water quality issues and compliance status.

B. SUMMARY OF RECOMMENDATIONS

Based upon the information provided by the company and by the CDPH, CWS' Redwood Valley District appears to be in compliance with all applicable water quality standards and requirements. Exceptions if any are noted below.

C. DISCUSSION

CWS' Redwood Valley District has six water systems in Lake, Marin and Sonoma Counties. The six water systems, serving a combined population of approximately 3,100, are: Armstrong Valley, Coast Springs, Hawkins, Lucerne, Noel Heights and Rancho del Paradiso. Lucerne is situated in CDPH District 3 (Mendocino); the other five are in CDPH District 18 (Sonoma).

DRA requested input from the relevant CDPH Districts regarding water quality issues in these systems. The CDPH in its response lists the following

1 issues: copper in Noel Heights, and iron, manganese and arsenic for Hawkins.⁹²
2 Following are discussions on water quality issues in each of the six Redwood
3 Valley systems.

4 **1) Armstrong Valley System**

5 Armstrong has two active groundwater wells. The only treatment currently
6 in place is disinfection. CWS reports that this system meets all applicable
7 drinking water standards.

8 **2) Coast Springs System**

9 Coast Springs has a groundwater system under the influence of surface
10 water (“GWUI”) system. It started Long-Term Two Surface Water Treatment
11 Rule (“LT2SWTR”) monitoring in October 2008.

12 CWS reports that its water supply has high levels of natural organic and
13 inorganic matter, as well as fairly high levels of particulates. Of its eight total
14 wells, the largest well (Well 4-01) produces about 70% of its total water
15 production. The remaining 30% comes from a collection of seven wells referred
16 to as “hill wells.” Water from the hill wells flows through an underground
17 pipeline to a raw water collection tank at the treatment plant and is mixed with
18 Well 4-01 water. All wells have elevated levels of iron and manganese. Current
19 treatments in this system include iron and manganese removal, membrane
20 filtration, disinfection and corrosion control.

21 Nitrate - Well 4-01 has elevated levels of nitrates, ranging from 25 to 35
22 mg/L. CWS blends water from Well 4-01 with water from the hill wells, which
23 also has elevated nitrate levels (but lower than that of Well 4-01). The nitrate
24 levels in the blended water range from 20 to 25 mg/L. CWS expects this level to

⁹² December 17, 2009 email communications from Janice Oakley of CDPH to DRA.

1 increase and exceed nitrate Maximum Contaminant Level (MCL) of 45 mg/L by
2 2015 to 2020.⁹³ It proposes installation of nitrate treatment at the treatment plant
3 in the next two to three years.⁹⁴

4 In December 2007, the CDPH issued two technical violations for the Coast
5 Springs water system for failure to collect the required samples by the specified
6 deadlines.⁹⁵

7 **3) Hawkins System**

8 The Hawkins system serves 51 customers. It is a groundwater system with
9 only one active well and one standby well (on standby since 2006).

10 Arsenic - Both active and standby wells have arsenic levels that are slightly
11 below the primary MCL.

12 Iron and Manganese - The system's groundwater is highly mineralized with
13 high concentrations of iron and manganese. CWS reports that the Hawkins system
14 currently does not meet drinking water standards for iron and manganese. CWS
15 has received several complaints of brown water unfit for drinking and causing
16 black stains to plumbing fixtures and other appliances.⁹⁶ The one active well has
17 manganese levels that are nine times the secondary MCL. The system uses ozone
18 treatment to oxidize iron and manganese. However, CWS reports that the ozone
19 system has not been sufficiently effective at removing these minerals and is
20 currently planning other treatment options.

⁹³ Testimony of Chet Auckly (Water Quality), page 35.

⁹⁴ Ibid.

⁹⁵ Testimony of Chet Auckly (Water Quality), page 60.

⁹⁶ CWS' response to DRA's data request 11.b.i.

4) Lucerne System

Lucerne system is served by a surface water treatment plant. Its source water is Clear Lake. CWS report numerous water quality issues in Lucerne:

- algal blooms and high Geosmin concentrations in the lake during the summer season which resulted in higher turbidities and customer complaints;
- high disinfection by-product (“DBP”) formation due to high organic concentrations and the resultant high chlorination to treat the high organic concentrations;
- taste and odor.

CWS reports that it received a MCL exceedance violation for Total Trihalomethanes (“TTHM”) in August 2007. CWS was fined \$350 and required to issue public notification. CWS completed the needed modification in June 2008 and has reduced the TTHM levels. CWS reports that to date its TTHM values are in compliance.

5) Noel Heights System

The Noel Heights system has only one active well and is a groundwater system under the influence of surface water (“GWUI”). The system’s current water treatment includes pre-filtration, filtration, and disinfection with sodium hypochlorite and ultra-violet.

Copper - CWS initiated a corrosion control system in 2006 to address lead and copper contaminations. CWS reports that although copper levels have fallen, they still exceed the 90th percentile action level. Because of this exceedance, the Noel Heights system does not meet all drinking water standards. CWS states that because the corrosion inhibitor has not removed copper adequately, pH and/or

1 alkalinity adjustment should be pursued to achieve compliance. CWS is installing
2 an “air diffuser system” at the treatment plant to adjust the pH of the treated
3 water.⁹⁷

4 Noel Heights’ manganese levels are close to the secondary MCL. Current
5 manganese levels range from non-detect to 69 ug/L. In response to DRA’s
6 inquiry, CWS states that it is addressing its primary compliance concerns with
7 corrosion control at this time and will address the manganese concern at a later
8 date.⁹⁸

9 **6) Rancho del Paradiso System**

10 The Rancho del Paradiso system is supplied mainly from a connection to
11 the Sweetwater Springs Water District (“SSWD”). The system’s current water
12 treatment consists of booster pump chlorination for the distribution system. CWS
13 reports that there are no water quality issues in this system.

14 **D. CONCLUSION**

15 Based on information received, it appears that CWS’ Redwood Valley
16 District is in compliance with all applicable water quality standards and
17 requirements, except for the instances described above.

⁹⁷ CWS’ response to DRA’s data request PPM-001, Item 11.d.i.

⁹⁸ CWS’ response to DRA’s data request PPM-001, Item 11.d.ii.

1 **CHAPTER 13: STEP RATE INCREASE**

2 **A. FIRST ESCALATION YEAR**

3 On or after November 1, 2011, the Commission shall authorize CWS to file
4 a Tier 1 advice letter, with appropriate supporting workpapers, requesting the step
5 rate increase for 2012 or to file a lesser increase in the event that the rate of return
6 on rate base, adjusted to reflect the rates then in effect and normal ratemaking
7 adjustments for the 12 months ending September 30, 2011, exceeds the lesser of
8 (a) the rate of return found reasonable by the Commission for CWS for the
9 corresponding period in the most recent rate decision or (b) the rate of return
10 found reasonable in this case. This filing should comply with General Order 96-B.

11 The Commission's Water Division ("Water Division") should review the
12 requested step rates to determine their conformity with this order, and the
13 requested step rates should go into effect upon the Water Division's determination
14 of compliance. The Water Division should inform the Commission if it finds that
15 the proposed rates do not comply with this Decision. The Commission may then
16 modify the increase. The effective date of the revised tariff schedule should be no
17 earlier than January 1, 2012. The revised schedules should apply to service
18 rendered on and after their effective date. Should a rate decrease be in order, the
19 rates should become effective on the filing date.

20 **B. SECOND ESCALATION YEAR**

21 For the second year, the Commission should grant an attrition adjustment
22 for the revenue requirement increases attributable to expense increases due to
23 inflation and rate base increases that are not offset by revenue increases. The
24 revenue changes shall be calculated by multiplying forecasted inflation rate and
25 operational attrition plus financial attrition times adopted rate base in 2012 times
26 the net-to-gross multiplier.

1 **C. ESCALATION YEARS INCREASES**

2 The table below shows the Summaries of Earnings for Escalation Years
3 2012 and 2013. To obtain the increases in these years, D. 04-06-018 and D. 07-
4 05-062 require water utilities to file an Advice Letter 45 days prior to the start of
5 the year showing all calculations supporting their requested increases.

6 The revenues shown in Table 12-1 are for illustration purposes and the
7 actual increases would be authorized only after approval of the utility's advice
8 letter.

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
 COAST SPRINGS RATE AREA
 REDWOOD VALLEY DISTRICT

	DRA 2011	DRA 2012	% increase	
Item	(Thousands of \$)			
Operating revenues	458.3	453.1	-1.1% Esc. Factor	
Operation & Maintenance	157.7	161.8	2.6%	1.026
Administrative & General	63.5	65.0	2.4%	1.024
G.O. Prorated Expense	60.7	62.3	2.6%	1.026
Depreciation & Amortization	91.8	94.2	2.6%	1.026
Taxes other than income	6.2	6.4	2.6%	1.026
State Corp. Franchise Tax	10.6	9.3	-12.5%	
Federal Income Tax	32.5	28.1	-13.4%	
Total operating expenses	423.0	427.0	1.0%	
Net operating revenue	35.4	26.0	-26.4%	
Rate base	412.3	303.5	-26.4%	
Return on rate base	8.58%	8.58%	0.0%	

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
 LUCERNE RATE AREA
 REDWOOD VALLEY DISTRICT

	DRA 2011	DRA 2012	% increase	
Item	(Thousands of \$)			
Operating revenues	1,680.2	1,743.8	3.8%	Esc. Factor
Operation & Maintenance	572.4	587.3	2.6%	1.026
Administrative & General	234.7	240.3	2.4%	1.024
G.O. Prorated Expense	222.2	228.0	2.6%	1.026
Depreciation & Amortization	164.1	168.4	2.6%	1.026
Taxes other than income	57.9	59.4	2.6%	1.026
State Corp. Franchise Tax	27.0	29.8	10.3%	
Federal Income Tax	72.3	82.3	13.9%	
Total operating expenses	1,350.6	1,395.5	3.3%	
Net operating revenue	329.6	348.3	5.7%	
Rate base	3,841.2	4,058.9	5.7%	
1 Return on rate base	8.58%	8.58%	0.0%	

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
 UNIFIED RATE AREA
 REDWOOD VALLEY DISTRICT

	DRA 2011	DRA 2012	% increase	
Item	(Thousands of \$)			
Operating revenues	591.0	587.0	-0.7% Esc. Factor	
Operation & Maintenance	225.0	230.9	2.6%	1.026
Administrative & General	107.8	110.4	2.4%	1.024
G.O. Prorated Expense	75.8	77.8	2.6%	1.026
Depreciation & Amortization	68.1	69.9	2.6%	1.026
Taxes other than income	13.3	13.6	2.6%	1.026
State Corp. Franchise Tax	8.5	7.0	-17.4%	
Federal Income Tax	33.8	28.9	-14.3%	
Total operating expenses	532.2	538.4	1.2%	
Net operating revenue	58.8	48.5	-17.5%	
Rate base	685.3	565.5	-17.5%	
1 Return on rate base	8.58%	8.58%	0.0%	

APPENDIX A

QUALIFICATIONS AND PREPARED TESTIMONY

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
PATRICK E. HOGLUND**

Q1. Please state your name and business address.

A1. My name is Patrick E. Hoglund. My business address is 505 Van Ness Avenue, San Francisco, California.

Q2. By whom are you employed and in what capacity?

A2. I am employed by the California Public Utilities Commission – Division of Ratepayer Advocates (DRA) Water Branch - as a Senior Utilities Engineer.

Q3. Please briefly describe your educational background and work experience.

A3. I am a graduate of the University of California, Berkeley, with a Bachelor of Science Degree in Industrial Engineering and Operations Research. I am also a graduate of the University of Rochester, William E. Simon School of Business with a Master of Business Administration Degree with concentrations in Finance and Corporate Accounting. I am a licensed professional Industrial Engineer.

I have been employed by the California Public Utilities Commission since 2005. Currently I work on Class A water General Rate Cases. From July 1999 through August 2004, I was a Senior Rates Analyst at Pacific Gas and Electric Company, where I worked on a variety of revenue requirements issues related to natural gas. From 1990 through 1997, I was employed by the California Public Utilities Commission. During this time I worked on small water utility rate cases, large water utility rates cases, and also worked in the Telecommunications and Energy Branches of the former Commission Advisory and Compliance Division, as well as in DRA.

Q4. What are your responsibilities in this proceeding?

A4. I am the Co-Project Manager for this proceeding with overall responsibility for twelve CWS Districts: Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, Oroville, Redwood Valley, South San Francisco, Stockton, and Willows. I am also responsible for the Executive Summary, Chapter 1-Overview and Policy, and Chapter 13-Step Rate Increase of the district reports.

Q5. Does this conclude your prepared testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
LISA BILIR**

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A.1 My name is Lisa Bilir and my business address is 505 Van Ness Avenue, San Francisco, California, 94102. I am a Public Utilities Regulatory Analyst V in the Water Branch of the Division of Ratepayer Advocates.

Q.2 Please summarize your education background and professional experience.

A.2 I received my Bachelor of Science degree in Biological Sciences from Stanford University in 2001 and a Master of Public Policy from The Goldman School of Public Policy at U.C. Berkeley in 2007.

From August 2006 to June 2007 I worked in the Water Branch of DRA as a graduate student intern. I have been a full-time staff member in DRA since October 2007. Since then I completed a settlement with California-American Water's (CAW) Los Angeles district and the City of Duarte on conservation rate design and revenue decoupling issues. I was DRA's project manager for CAW's conservation application for the Monterey District, where I completed settlements with CAW and Monterey Peninsula Water Management District on conservation programs and plans. I also submitted testimony in CAW's Monterey District GRC regarding conservation rate design and revenue decoupling issues and reached a settlement on that issue. In addition, I completed a settlement with San Gabriel Valley Water Company (SGVWC) in May 2008 regarding an interim budget and funding mechanism for conservation programs in its Fontana Water Company Division. I am DRA's project manager for SGVWC's conservation application A.08-09-008 and submitted testimony regarding rate design, revenue decoupling and reporting requirements in that proceeding.

Q.3 What is your responsibility in this proceeding?

A.3 I am responsible for the chapters on Rate Design, and Special Requests 1, 6, 11, 12, 13, 15, and 29 and I am a co-author for the chapters on Revenue and Special Request #28. For the Revenue chapters, I am primarily responsible for the number of customer and revenue calculations; for the Special Request #28, I am responsible for the portion of the chapter other than the Introduction and discussion of an OIR.

Q.4 Does this conclude your prepared direct testimony?

A.4 Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
ZACHARY BURT**

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A.1 My name is Zachary Burt and my business address is 505 Van Ness Avenue, San Francisco, CA 94102. I am an intern in the Water Branch of the Division of Ratepayer Advocates.

Q.2 Please summarize your education background and professional experience.

A.2 I received a dual bachelor's degree in Economics and Chemistry from the University of California at Berkeley in 2001. I received a Master's of Science from the Energy and Resources Group at U.C. Berkeley in May, 2009, and am continuing on to pursue a PhD in the same program as of Fall 2009. My program of study focuses on the economics of water, including demand management, conservation pricing and water services treatment and provision. In DRA, I analyzed and made recommendations on Golden State Water Company's conservation rate designs and reached a settlement with Golden State Water Company in that case. I also wrote testimony and testified orally on San Gabriel Valley Water Company's conservation rate design proposals.

Q.3 What is your responsibility in this proceeding?

A.3 I am a co-author of Chapter 2 on Revenues, and am primarily responsible for the sections regarding sales forecasts.

Q.4 Does this conclude your prepared direct testimony?

A.4 Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
RAYMOND YIN**

- Q1. Please state your name, business address, and position with the California Public Utilities Commission (The “Commission”).
- A1. My name is Raymond Yin and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Public Utilities Financial Examiner in the Water Branch of the Division of Ratepayer Advocates.
- Q2. Please summarize your education background and professional experience.
- A2. I graduated from San Francisco State University, with a Bachelor of Science Degree in Accounting. I am a Certified Public Accountant in the State of California. I have been employed by the Commission since January 2008. Previously I was employed by the California State Department of Health Care Services. I have been a tax witness on the following Class A water utilities’ General Rate Cases: Suburban Water Systems, Park Water Company, San Jose Water Company, and California American Water Company.
- Q3. What is your responsibility in this proceeding?
- A3. I am a witness for this proceeding and responsible for Chapter 3 –Operation and Maintenance Expenses for the following districts: Chico, Dixon, Marysville, Oroville, Redwood Valley, Stockton, and Willows.
- Q4. Does this conclude your prepared direct testimony?
- A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
CLEASON D. WILLIS**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Cleason D. Willis and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Regulator Analyst in the Water Branch of the Division of Ratepayer Advocates (DRA).

Q2. Please summarize your education background and professional experience.

A2. I graduated from the California State University of Hayward with a Bachelor of Science Degree in Business Administration and Finance, and a Masters of Science Degree in Public Administration and Management. After graduation I joined the California Public Utilities Commission. Since that time I have performed economic and reasonableness analysis for various electrical, gas, water, and telecommunications operations. I have written reports and testified regarding the validity of my findings and recommendations concerning my analysis for various utility proceedings.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for Chapter 4 - Administrative and General Expenses for the following California Water Service Company's northern districts: Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, Oroville, Redwood Valley, South San Francisco, Stockton, and Willows.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
K. JERRY OH**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is K. Jerry Oh and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Financial Examiner IV in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background.

A2. I graduated from the University of California at Los Angeles, with a Bachelor of Arts in Business Economics.

Q3. Briefly describe your professional experience.

A3. I have been employed by the Commission since February 2000. While at the CPUC, I have conducted audits of water and energy utilities, managed contract auditors, and reviewed energy procurement costs. For the past three years, I have worked on different areas of a water utility's GRC.

Q4. What is your responsibility in this proceeding?

A4. I am responsible for review of the Affiliate Transaction of CWS, General Office Cost Allocation, Taxes for the Bear Gulch, Chico, Dixon, Livermore, Los Altos, Marysville, Mid-Peninsula, South San Francisco, Oroville, Redwood Valley - Coast Springs, Redwood Valley - Lucerne, Redwood Valley - Unified, Stockton, and Willows districts, and Special Request 3.

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
ISAIAH LARSEN**

Q1. Please state your name, business address and position with the California Public Utilities Commission (Commission).

A1. My name is Isaiah Larsen. My business address is 505 Van Ness Avenue, San Francisco, California 94102. My job title is Utilities Engineer and I work in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your educational background and work experience.

A2. In December 2007, I completed my M.S. in Environmental Engineering at the University of California, Berkeley. My undergraduate degree is in Materials Science and Engineering from the University of California, Los Angeles.

I have been employed as a student intern at both Lawrence Livermore National Laboratory (LLNL) and Sandia National Laboratories in Livermore, CA. While at LLNL, I designed and fabricated micro-fluidic hydrogen fuel cells for portable power applications.

As a graduate student intern with the Water Branch, my work included a settlement between DRA and Del Oro Water Company on the Regional Intertie Project. I have been a full-time staff member of DRA since July 2008. I have prepared written and oral testimony for the following proceedings: the conservation and rationing programs in Phase 2 of Cal Am's Conservation A.07-12-010, unaccounted for water in Cal Am's Monterey GRC, A.08-01-027, and utility plant in service and conservation for the SJWC GRC, A.09-01-009.

Q3. What is your responsibility in this proceeding?

A3. I am the witness responsible for Utility Plant in Service testimony for Willows, Marysville, Redwood Valley, Dixon, Stockton, Livermore, Bear Gulch, Los Altos, Mid-Peninsula, and South San Francisco. I am responsible for Depreciation, Working Cash and Lead-Lag testimony for these districts. I am also responsible for Special Request 20.

Q4. Does that complete your prepared direct testimony in this proceeding?

A4. Yes.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
RICHARD RAUSCHMEIER**

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Richard Rauschmeier and my business address is 505 Van Ness Avenue, San Francisco, California. I am an Auditor in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your educational background.

A2. I graduated from The Johns Hopkins University with a Bachelor's degree in Environmental Science, concentrating in chemistry and water treatment. In 2000, I earned a Masters of Science from Purdue University. In 2008, I completed training and successful examination for certification as both a Water Treatment and Distribution Operator in California under the State's Department of Public Health.

Q3. Briefly describe your professional experience.

A3. For more than 10 years, I have worked as an employee or consultant assisting organizations develop efficient and effective business policies and practices. In December of 2008, I joined the California Public Utilities Commission as an Auditor.

Q4. What is your responsibility in this proceeding?

A4. I am sponsoring the calculation of Net-To-Gross Multipliers of all districts (see Chapter 9), as well as, DRA's testimony in Chapter 5 (Taxes Other Than Income) and Chapter 6 (Income Taxes) for the 12 districts (Antelope Valley, Bakersfield, Dominguez, East Los Angeles, Hermosa-Redondo, Kern River, King City, Palos Verdes, Salinas, Selma, Visalia, and Westlake).

Q5. Does this conclude your prepared direct testimony?

A5. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
TONI CANOVA**

Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Toni Canova and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utility Regulatory Analyst in the Water Branch of the Division of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I graduated from The Evergreen State College in Olympia, Washington, with a Bachelor of Arts Degree in Environmental Studies. I have been employed by the Commission for over six years. I have testified before the Commission in General Rate Cases involving several Class A water utilities including California Water Service Company and Park Water Company. Previously, I was employed by the State of Washington's Department of Ecology for 10 years.

Q3. What is your responsibility in this proceeding?

A3. I am responsible for testimony in Chapter 10 – Customer Service, and for the Result of Operations tables for the twelve northern districts.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

**QUALIFICATIONS AND PREPARED TESTIMONY
OF
PAT MA**

- Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).
- A1. My name is Pat Ma and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Utilities Engineer in the Water Branch of the Division of Ratepayer Advocates (DRA).
- Q2. Please summarize your education background and professional experience.
- A2. I received a Bachelor of Science Degree in Industrial Engineering with a concentration in Management from San Jose State University in 1986. In December 2008, I rejoined the Commission as a Utilities Engineer in the DRA's Water Branch. My previous professional position was as a Senior Utilities Engineer at the Commission, where I worked from 1986 to 1999 in transportation, telecommunications, energy and water areas. I received my Professional Engineer License in Industrial Engineering in the State of California in 1989 and also worked briefly for the U.S. EPA, Region 9 as an Environmental Engineer in 1989.
- Q3. What is your responsibility in this proceeding?
- A3. I am a witness for this proceeding and responsible for Chapters 3 - Operations and Maintenance Expenses for California Water Service Company's Bear Gulch, Livermore, Los Altos, Mid Peninsula and South San Francisco districts and Chapter 12 - Water Quality for its twelve northern districts.
- Q4. Does this conclude your prepared direct testimony?
- A4. Yes, it does.